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*see Lehr, D: Federation Proc. 8:315 (1949)

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Ivyol, purified active principle of *Rhus toxicodendron* (1:1,000) in sterile olive oil; for *phylactic* as well as *prophylactic* use.

Poison-Ivy Extract beneficial for PHYLACTIC TREATMENT of RHUS POISONING (from Poison Ivy, Poison Oak, or Poison Sumac)

IVYOL®, the same poison-ivy extract that is used so extensively for *prophylactic desensitization*, is also widely preferred for *phylactic treatment* in ivy, oak, and sumac poisoning. Reports from many sources show the advantage of using an extract that contains the active principle.

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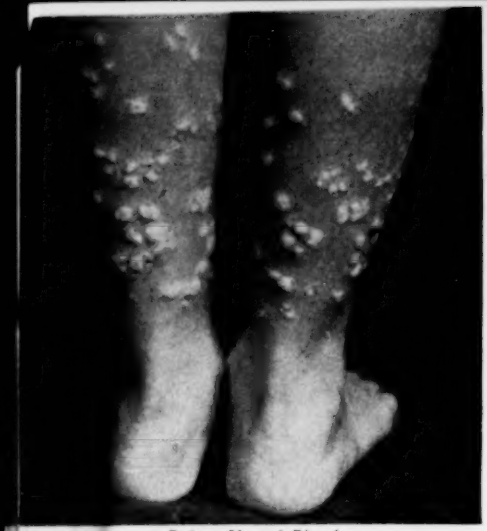
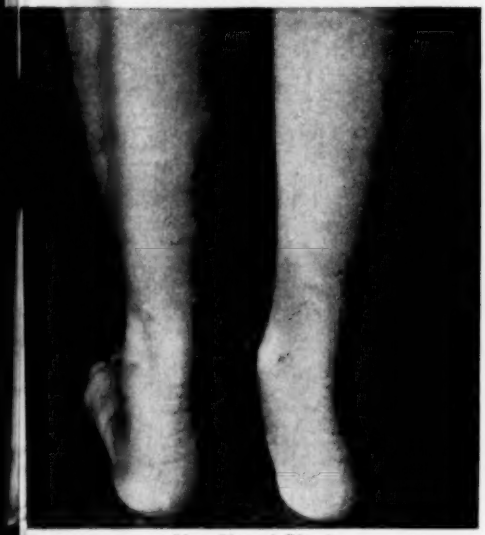


Before Use of Riasol



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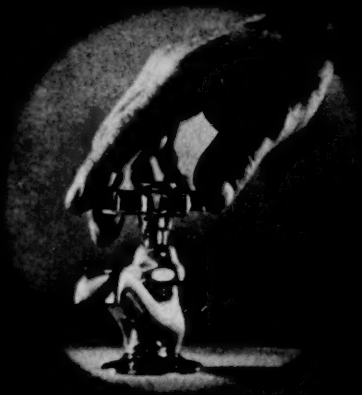
RIASOL FOR PSORIASIS

MODERN MEDICINE

THE JOURNAL OF DIAGNOSIS AND TREATMENT



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from "intractable" asthma

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ACTHAR Dosage.—***Initial Dose:*** Less severe cases, 12.5 mg. q. 6 h. Severe, chronic cases, including status asthmaticus, may require up to 25 mg. q. 6 h. The initial dose should be continued from 2 to 4 days or longer in severe cases. ***Tapering of Dose:*** When symptoms have been controlled, decrease dosage 5 mg. per injection every other day until a total of 10 to 12 days of therapy has been given. ***Maintenance Therapy:*** May be required in severe, chronic asthma; 10 to 20 mg. once or twice per day.

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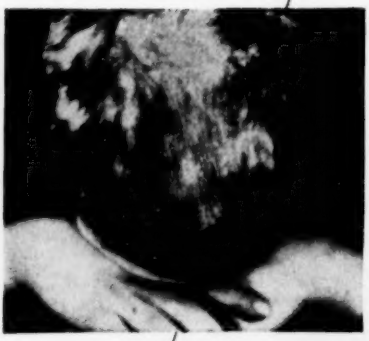

tinea capitis

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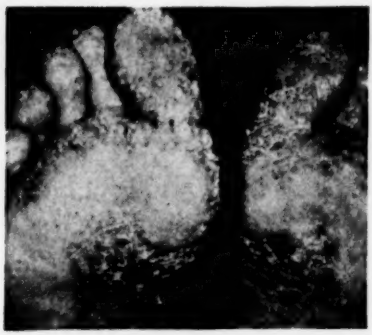

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In "athlete's foot" a combined cured and improved rate of 95% has been obtained.[1]

Also indicated in

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tinea versicolor
tinea of the nails

"broad antifungal spectrum ...good cutaneous tolerance."[1]

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5% tincture . . . ointment . . . powder . . .
sprayed, applied with cotton or dusted on

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1. Strittler, C.; Fishman, I. M., and Laurens, S.: *Transactions New York Acad. Sc., 13*:31, Nov., 1950.

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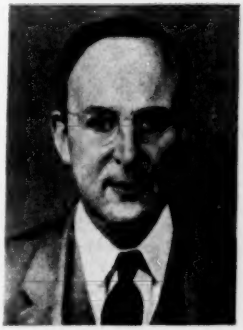
for
July 1
1951

Modern Medicine
Vol. 19, No. 13



THE MAN ON THE COVER is Dr. Louis K. Alpert, Washington, D.C., where he practices and serves as Adjunct Clinical Professor of Medicine at George Washington University School of Medicine, Chief of General Medical Service, Veterans Administration Hospital, and Chief of Cardiology and Internal Medicine at General Hospitals. His special interests are diseases of the heart and of metabolism. He is an active member of the American Heart Association and the American Diabetes Association. In World War II he was a major in the Medical Corps of the Army. The Special Article, "The Collagen Disorders," on page 51 was written expressly for *Modern Medicine*.

Contents for July 1 1951

CONTINUED

MODERN MEDICINE, The Journal of Medical Progress, is published twice monthly on the first and fifteenth of each month at Minneapolis, Minn. Subscription rate: $5.00 a year, 25c a copy. Business Manager: M. E. Herz. Address editorial correspondence to 84 South 10th Street, Minneapolis 3, Minn. Telephone: Bridgeport 1291. ADVERTISING REPRESENTATIVES: New York 17: Lee Klemmer, George Doyle, Bernard A. Smiler, John Winter, 50 East 42nd Street, Suite 401. Telephone: Murray Hill 2-8717. CHICAGO 6: Jay H. Herz, 20 North Wacker Drive, Suite 1921. Telephone: Central 6-4619. SAN FRANCISCO 4: Duncan A. Scott & Co., Mills Bldg. Telephone: Garfield 1-7950. LOS ANGELES 5: Duncan A. Scott & Co., 2978 Wilshire Blvd. Telephone: Dunkirk 8-4151.

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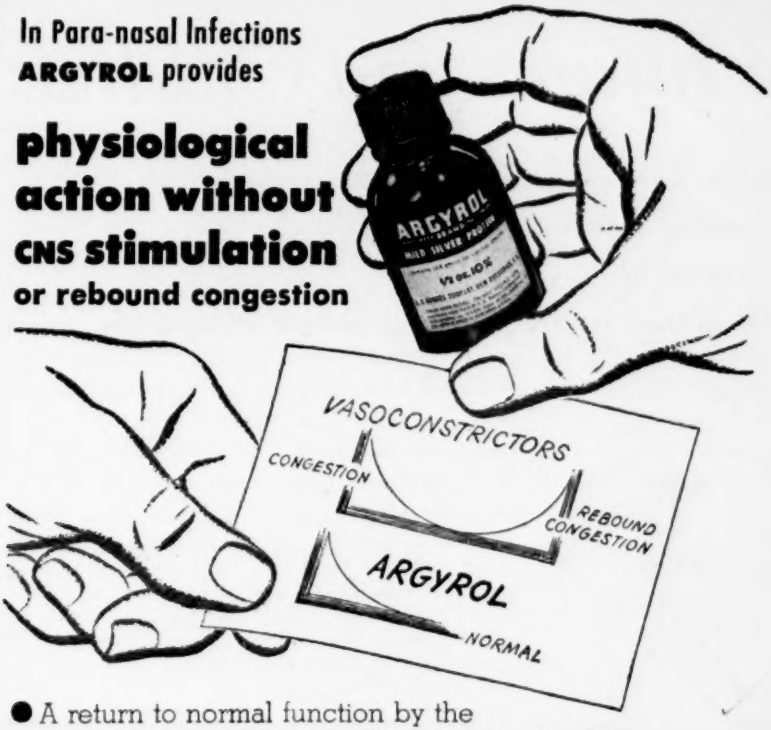
ARGYROL provides

physiological action without CNS stimulation or rebound congestion



● A return to normal function by the decongestive, demulcent and bacteriostatic actions of ARGYROL is achieved without the side effects and rebound so frequent with many vasoconstrictors. In the solution of para-nasal problems, the ultimate advantages of using ARGYROL are readily apparent.

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Colicky gastrointestinal disorders . . .
excited nervous states . . .
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insomnia accompanying severe infections . . .

Whenever a barbiturate is indicated in pediatric practice for sedation or hypnosis, remember the gentle "intermediate" action of Elixir Butisol Sodium. Butisol Sodium is metabolized in the body and hence provides sedation with less risk of barbiturate accumulation than with phenobarbital.

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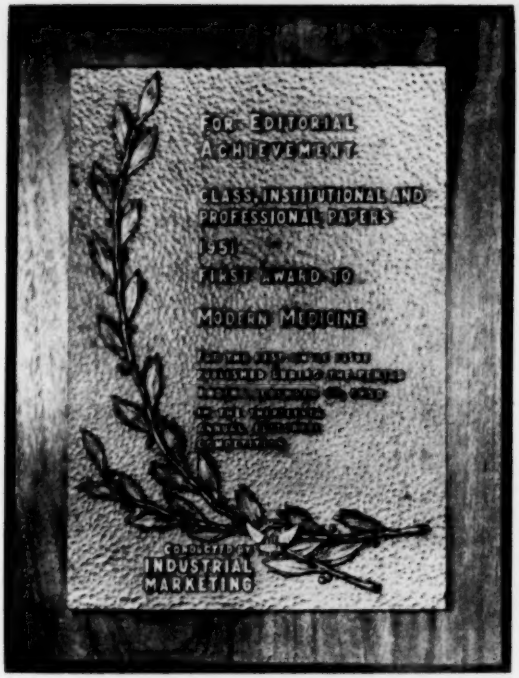
LETTER *from* THE EDITOR



Dear Reader:

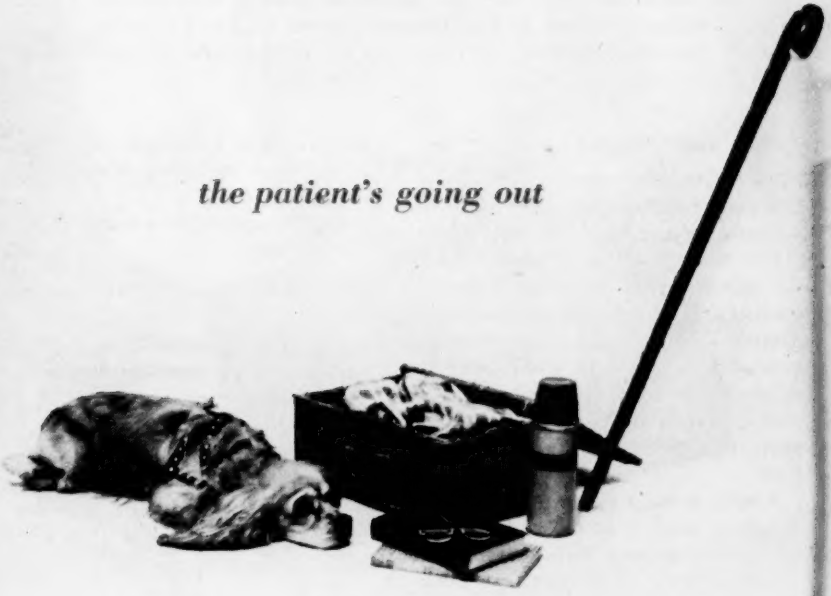
The plaque pictured on this page should be "To the Readers of *Modern Medicine*," for actually it is a testimonial to the exacting standards of editorial excellence which you demand.

The award was made at the Business Paper Editorial Achievement Competition, where the "Symposium on Fractures," edited by Dr. Edwin B. Plimpton of our Editorial Board, was judged the best single 1950 issue of any journal published in the professional field. This symposium, you may recall, was republished in Canada by *Modern Medicine of Canada,* and in Europe by *Ars Medici.*

Pleased as we are by the honor, we are prouder by far that you and thousands of doctors like you in active practice look to every issue of *Modern Medicine* for news of the latest developments in diagnosis and treatment. National recognition naturally follows from the satisfaction of a readership as critically discriminating as ours. May we continue to merit your attention.

EDITOR

the patient's going out



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Correspondence

Communications from the readers of MODERN MEDICINE *are always welcome. Address communications to The Editors of* MODERN MEDICINE, *84 South 10th St., Minneapolis 3, Minn.*

Taken for Granted

TO THE EDITORS: *Modern Medicine* has been coming ever since medical school days and has been enjoyed so much that I guess I almost took for granted that it would keep on coming indefinitely. At present, with French language and tropical medicine studies to deal with, *Modern Medicine* is about the only journal that gives me the most for the time spent reading, which is quite limited now.

I want to keep the journal coming, so please send it to my address here in France together with charges.

With regard to the Surgical Technigrams, I certainly would be one for wishing they might be published as a whole series, and would be glad to purchase a copy.

JOHN H. ROUCH, M.D.

Villennes-sur-Seine, France

¶Dr. F. M. Al Akl, author of the Technigrams which have been published in *Modern Medicine*, is considering publication, in book form, of the entire series together with 30 additional procedures presenting surgical solutions to more difficult problems. Readers interested in such a project should write to Dr. Al Akl at 8000 Fourth Ave., Brooklyn 9, N.Y.—Ed.

Variations on a Theme

TO THE EDITORS: Enclosed is a cartoon which you published on February 1, 1951. I thought you might be interested in having my variation of this theme.

JOSEPH D. WASSERSUG, M.D.

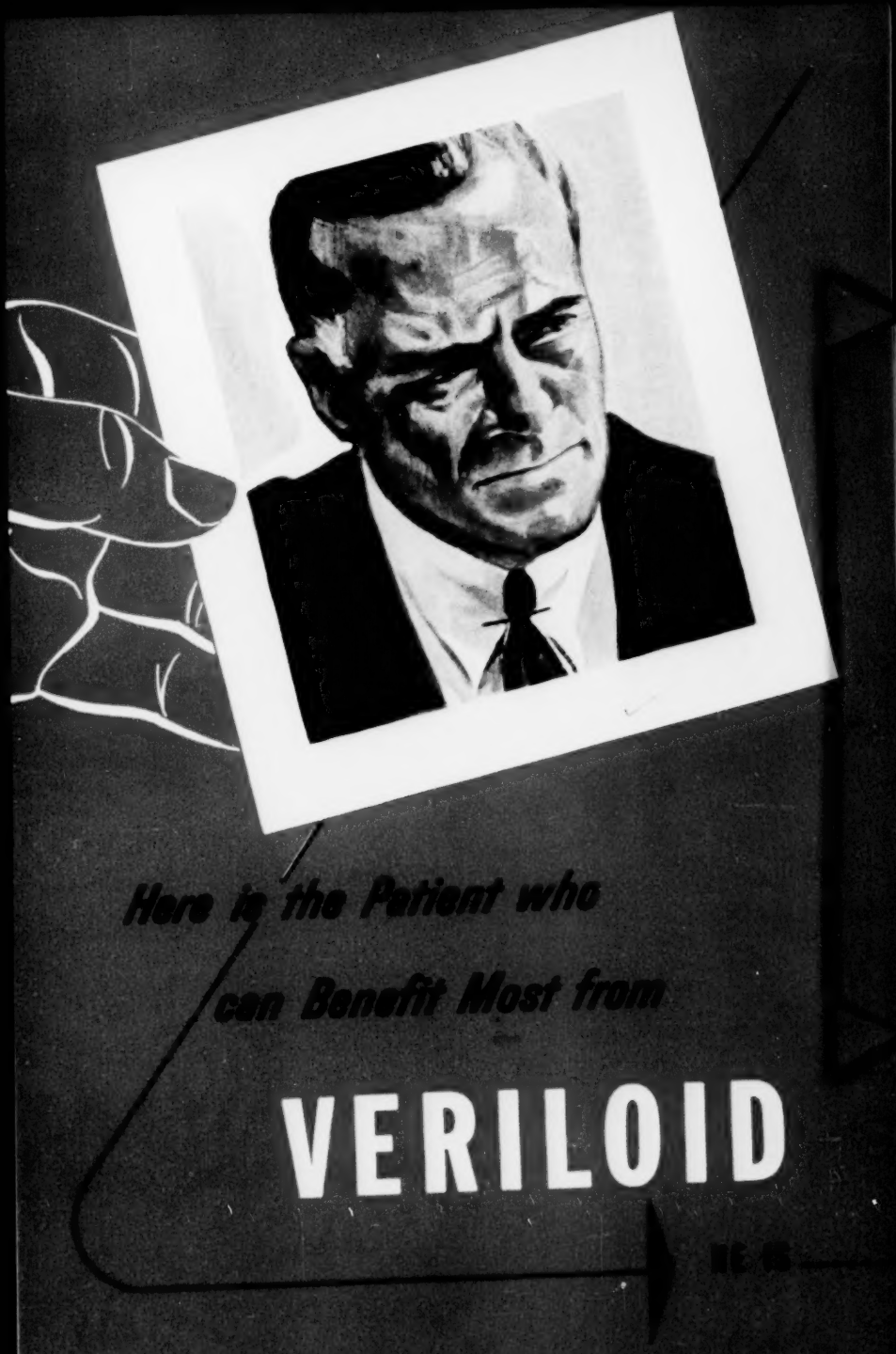
Quincy, Mass.

¶This is the cartoon that was published in *Modern Medicine*.

"That's the new doctor's little boy."

. . . Here is Dr. Wassersug's variation.—Ed.

"That's the new psychiatrist's little boy."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*Maison, G. L., and Stutzman, J. W.: A Bioassay for Veratrum Derivatives Based on Hypotension in Dogs, Arch. internat. de pharmacodyn. et de therap. 85:357 (Feb. 1) 1951.

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Not Cause of Adrenal Atrophy

TO THE EDITORS: The article by Dr. Klaus A. J. Järvinen on rheumatoid arthritis and diabetes mellitus which appeared in the April 15, 1951 issue of *Modern Medicine* (p. 78) is open to some criticism.

The statement that ACTH and cortisone cause adrenal atrophy is not true.

Although Dr. Sprague and others have demonstrated anatomic evidence of adrenal cortical atrophy occuring under cortisone therapy *(Proc. Second Clinical ACTH Conference,* Blakiston Co., Philadelphia, 1951), directly opposite effects have been observed in the use of ACTH. Under the influence of ACTH, the specific physiologic stimulant of the adrenal cortex, enhancement of adrenal cortical activity has been consistently reported. A recent publication discloses a four- to fivefold increase in the weight of adrenal glands in guinea pigs treated with high-dosage ACTH therapy for periods up to twenty days (G. A. Hyman, C. Ragan, and J. C. Turner, *New York Acad. Sc.* 13:167, 1951).

It is essential to remember that ACTH is a specific pituitary principle capable of *stimulating* endogenous adrenal cortical secretion, while cortisone is a single adrenal cortical steroid capable of *suppressing* endogenous adrenal cortical secretion.

Therefore, the two drugs are distinctly different in their modus operandi and cannot be referred to or used interchangeably.

Desoxycorticosterone is referred to as the "essential antirheumatism factor." This is also in error. [The thought intended to be conveyed in the report was that reduced secretion

of desoxycorticosterone was a factor in relieving rheumatism, not that desoxycorticosterone itself was an "antirheumatism factor."—Ed.] Dr. Selye has referred to desoxycorticosterone, a mineralo-corticoid, as the essential factor in the *production* of experimental rheumatoid arthritis and vascular lesions in animals under very definite conditions (unilateral nephrectomy and high-salt intakes). The compound F–like adrenal cortical steroids, such as cortisone, have been referred to as powerful "antirheumatic" substances by Dr. Hench.

Lastly, even though the author's assumption that the pituitary and the adrenals are implicated in diabetes mellitus may be valid, there is absolutely no concrete evidence that the ordinary case of middle-age diabetes mellitus is associated with increased pituitary or adrenal cortical activity.

When frank overactivity of the pituitary (acromegaly) or of the adrenals (Cushing's syndrome) exists, the diabetes that is observed is of the insulin-resistant variety (Albright) and is almost never associated with ketosis, acidosis, or depletion of liver and tissue glycogen.

Even though it has been shown that adrenalectomy or hypophysectomy will attenuate experimental pancreatic diabetes (alloxan or pancreatic extirpation), it does not seem valid to assume that adrenal cortical atrophy occurring under cortisone therapy would be sufficient to explain the rapid and dramatic effects observed in the reversal of the symptoms of rheumatoid arthritis. Rather, it would seem to imply direct drug action unrelated to the ensuing adrenal cortical atrophy.

RICHARD J. MEYER, M.D.
Chicago

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Eskadiazine is so good tasting, so light and easy to swallow that patients of all ages—children in particular—take it willingly. Furthermore, Eskadiazine *acts faster* because it contains, instead of ordinary sulfadiazine, S.K.F.'s *'Micraform'* sulfadiazine. Desired serum levels are attained 3 to 5 times more rapidly with Eskadiazine than with sulfadiazine in tablet form.

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Analgesia by Counter-irritation

TO THE EDITORS: In "Relief of Angina," printed in the April 15, 1951 issue of *Modern Medicine* (p. 72), it was interesting to note that the fruitful experience of others concurs with my modest knowledge that ethyl chloride spray, when evaporated on the chest, relieves quasi-instantly the torment of angina.

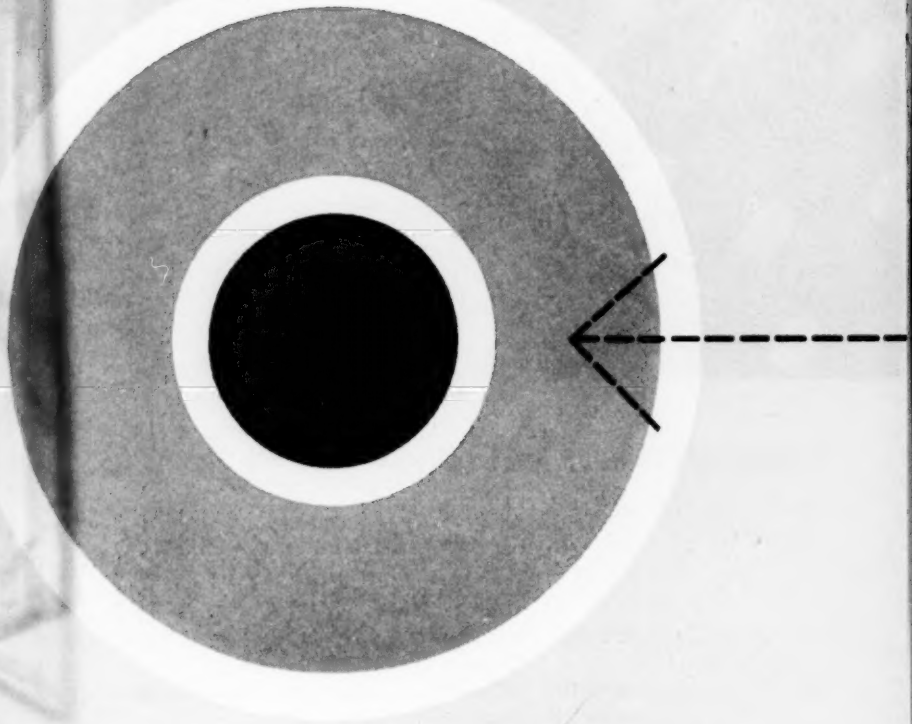
Treating internal pains by counter-irritation of the skin is an old Chinese and Arab method established for centuries, with acupuncture in the first type and cautery (in Arabic: *kaie*) in the second.

I have relieved most of the pain of severe osteoarthritis of the knee within five minutes by inserting ordinary 20-gauge hypodermic needles to the depth of 1 or 2 cm. in specific areas, possibly identified with trigger points, and keeping the needles in place for two minutes.

Please accept my sincere thanks for *Modern Medicine,* which I receive regularly. In French we would have said *Si la Modern Medicine n'existait pas, il aurait fallu l'inventer.* (If *Modern Medicine* did not exist, one would have had to invent it.) It is a necessity.

HENRI RATHLE, M.D.

Brooklyn



"I am going to give you penicillin for five days. If there is no improvement, then we'll do a physical examination."

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Supplied — *2.0 Gm. with 10 cc. of diluent, and calibrated dropper.*

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KHELLOYD — Maximum Therapeutic Effect — Because KHELLOYD contains only pure khellin, the potent selective action of the drug on the coronary circulation is not complicated by the presence of related chromones or other plant constituents. KHELLOYD reduces the severity and frequency of angina pectoris attacks, and increases the exercise tolerance of the patient with coronary insufficiency.

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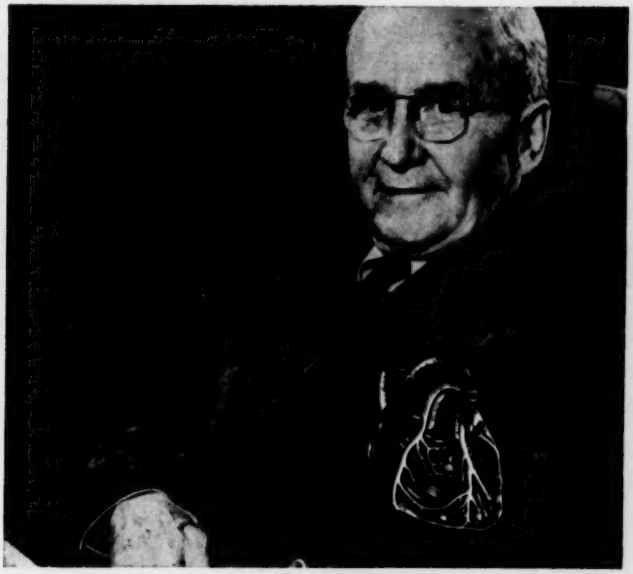
For Maximum Results in Angina Pectoris

Effect in Angina

- **Maximum Pain Prevention**
- **Maximum Safety in Use**
- **Maximum Convenience in Prescribing**



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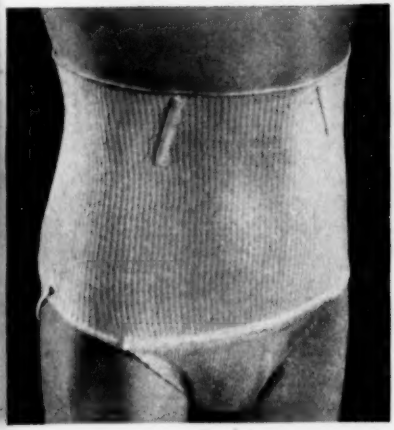

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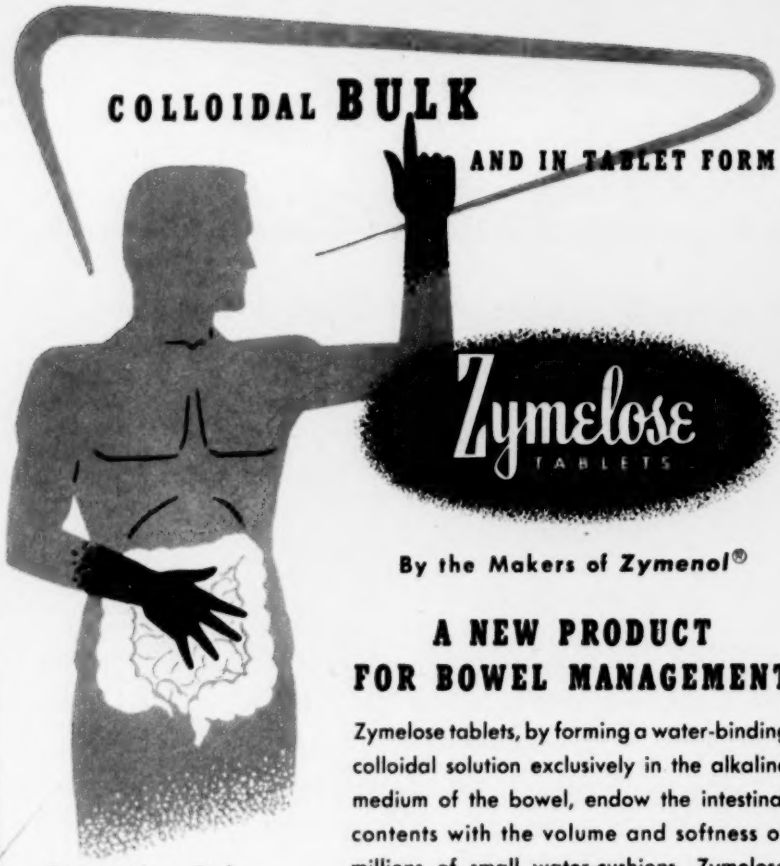

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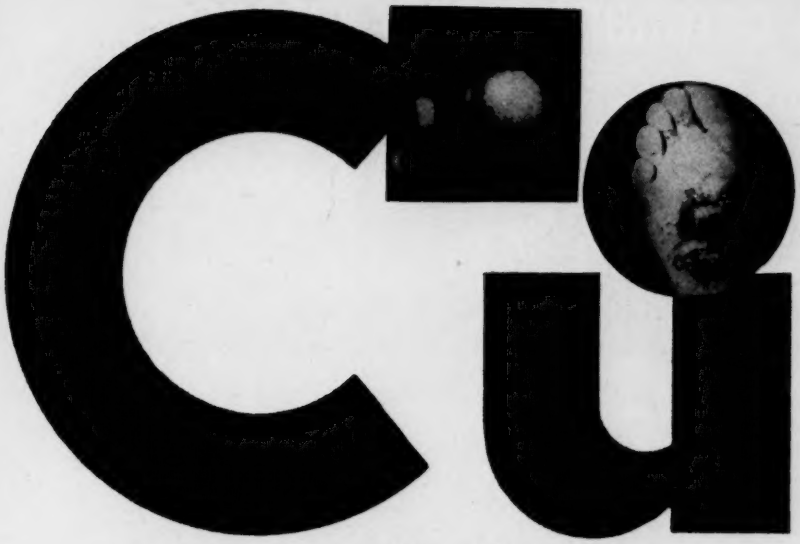

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Nicotinic Acid	20 mg.	Nicotinic Acid	5 mg.
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1. Gertler, M. M.: et al.: Circulation 2: 837 (1950). 2. Morrison, L. M.: Ann. West. Med. & Surg. 4: 665 (1950). 3. Hueper, W. C.: M. Clin. North America 33: 773 (1949).

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Collick, L. and Ogden, H. D.: J. South Med. Assn. **43**: *No. 7, July 1950*

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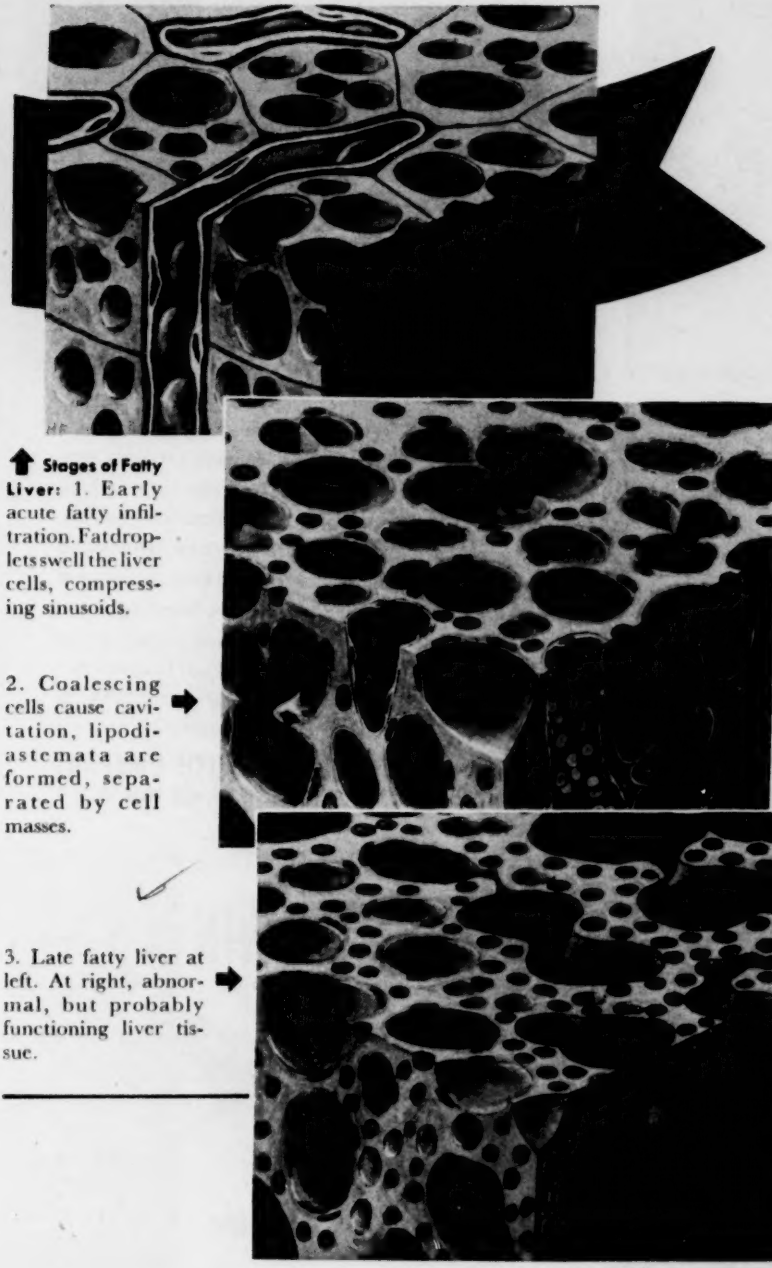

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2. Coalescing cells cause cavitation, lipodiastemata are formed, separated by cell masses.

3. Late fatty liver at left. At right, abnormal, but probably functioning liver tissue.

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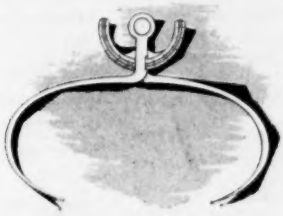

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Questions & Answers

All questions received will be answered by letter directed to the petitioner; questions chosen for publication will appear with the physician's name deleted. Address all inquiries to the Editorial Department, MODERN MEDICINE, *84 South Tenth Street, Minneapolis 3, Minnesota.*

QUESTION: I have a patient whose penis turns almost at right angles to itself when in erection, at about its midpoint. What is the cause, and how can it be remedied?

M.D., Missouri

ANSWER: *By Consultant in Urology.* The patient described probably has Peyronie's disease. If so, careful palpation will show a flat, hard, sharply marginated plaque on the dorsum of the penis at about the area in which the angulation is found.

The condition is due to the deposition of scar tissue and sometimes calcium salts in Buck's fascia on the dorsal aspect of the corpora cavernosa. Unfortunately, some of this fibrosis extends into one or the other corpus and obliterates the venous sinuses, so that when erection occurs the affected side elongates less than the unaffected side and produces the curvature. A bilateral lesion usually results in sharp dorsal curvature of the penis.

No real remedy for the condition is known. Operative excision has been followed by recurrence. Dr. Miley Wesson of San Francisco recommends prolonged self-treatment with a diathermy machine purchased by the patient, but disappearance of the scar tissue with application of heat seems unlikely. W. W. Scott recommends prolonged administration of alpha tocopherol; probably full doses should be used, say 300 mg. a day, and continued for many months before giving up the treatment as ineffective.

QUESTION: Can you suggest any new treatment or medication for patients with senile nocturnal dementia? During the day these patients behave fairly well, but their nightly commotion is cause for concern.

M.D., Ohio

ANSWER: *By Consultant in Psychiatry.* The writer probably refers to nocturnal excitements occurring in patients with cerebral damage caused generally by outbursts of fear, anxiety, or confusion. The complete PHOP quadrad must be employed—pharmac therapy, hydrotherapy, occupational therapy, and psychotherapy. A consistent routine of living with occupational activity limited to the patient's capacities is advisable.

For hydrotherapy, a continuous tub bath for one-half to a full hour at 96.5° F. is the most convenient in the home. Reassurance and intimate discussion of the patient's problems do a great deal toward allaying the anxiety that breaks through at evening. Among drugs, the barbiturates

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G. P., Oct. 1950, p. 37—Obesity in Children—Irvine McQuarrie, M. D.

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may be administered: scopolamine, 1/150 gr., may be given during the day or before retiring; with severe symptoms, small amounts of opium are indicated.

These patients should be maintained in their homes as long as feasible, but institutional care must be considered when their activities might prove harmful to themselves or others.

QUESTION: A woman gets cracks at the tip of the palmar surfaces of her fingers and thumbs. These heal readily but break out again immediately. What treatment is advised?

M.D., Missouri

ANSWER: *By Consultant in Dermatology.* Accurate diagnosis of this case requires more definite knowledge of the patient's age, occupational duties, general health, and so on. Drying and cracking of the tips of the fingers may result from ichthyosis, contact dermatitis, neurodermatitis and is not infrequently seen at the time of the climacteric without sufficient inflammation for diagnosis as a dermatitis.

Often a nightly application of diachylon ointment, without oil of lavender, kept on by wearing cotton gloves, is helpful. Lotions to relieve dryness may be used during the day. Healing of fissures may be aided by painting with 5 or 10% solution of silver nitrate once or twice weekly. Systemic treatment may be desirable, depending on the cause.

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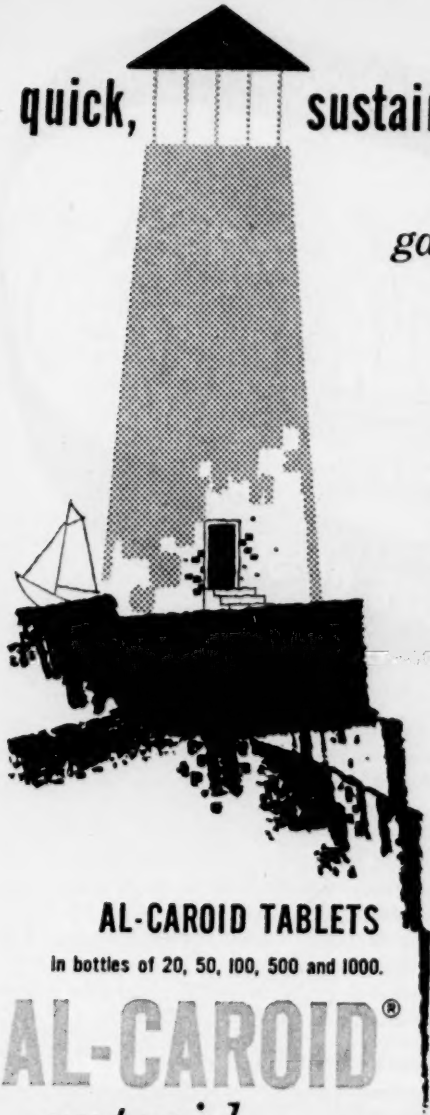

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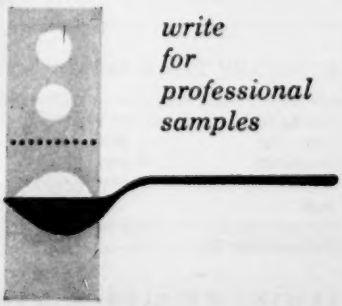

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QUESTION: Is sodium silicate safe to use in treating hard and soft acid water for domestic consumption? Do health authorities specify a limit in the amount used?

M.D., Pennsylvania

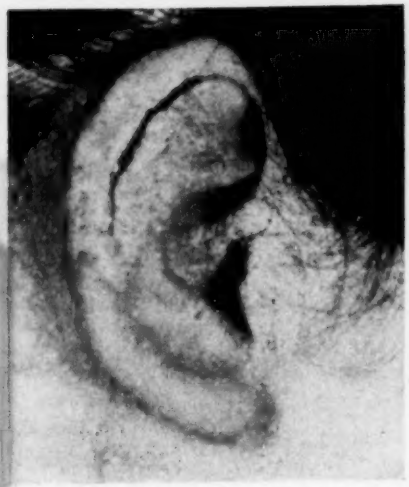
ANSWER: *By Consultant in Pharmacology.* Sodium silicate is used to treat hard and soft waters for the purpose of neutralizing acidity, and thus preventing corrosion in the carrying systems.

The quantity of sodium silicate is self-limited. If used excessively, the resulting alkalinity renders the water nonpotable. In addition, drinking water standards prohibit the presence of more than 500 p.p.m. of total solids, thereby restricting the amount of soluble silicates. Turbidity must not be more than 10 p.p.m. on the silicate scale, thus limiting the amount of insoluble silicates. These factors would seem to preclude the harmful effect of sodium silicate in excessive amounts.

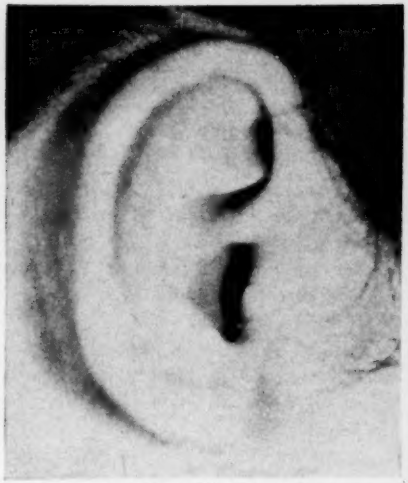
QUESTION: Is plastic surgery recommended for premature baldness? Can grafts be taken from the side and back of the head to restore the former hairline?

M.D., California

ANSWER: *By Consultant in Plastic Surgery.* Plastic surgery has nothing to offer in cases of premature baldness. Free grafts of hair-bearing scalp do not take well and do not retain hair growth.



Photograph above shows psoriasis of 25 years' duration.



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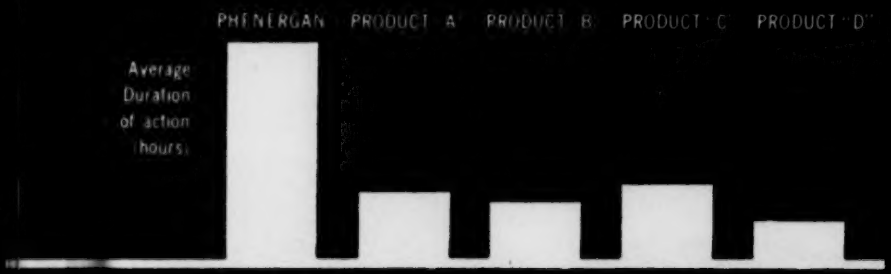

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1. Shulman M.R.: Ann. Allergy, 7:506, 1949

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Special Article

The Collagen Disorders

LOUIS K. ALPERT, M.D.*

Prepared for Modern Medicine

SINCE 1942, the term "diffuse collagen diseases" or the more inclusive one of "collagen-vascular disorders" has been used for a group of diseases with diversified clinical manifestations but similar tissue changes. In these disorders, the collagen, or intercellular ground substance of the connective tissue, undergoes an alteration which appears microscopically as a granular material that stains deeply pink with eosin and resembles fibrin. This change is therefore referred to as fibrinoid degeneration.

In addition, the connective tissue shows varying degrees of proliferation, and infiltration of leukocytes is frequently seen. Since the walls of arteries and veins contain considerable amounts of connective tissue, these degenerative, proliferative, and inflammatory changes often occur in and around blood vessels but are also found in the fibrous tissues throughout the body.

Diseases Included in Category

The disorders which are commonly included in the group of collagen disorders are disseminated lupus erythematosus, periarteritis or polyarteritis nodosa, scleroderma, dermatomyositis, rheumatoid arthritis, and rheumatic fever. In addition, several diseases which show similar histologic alterations may

* Adjunct Clinical Professor of Medicine, George Washington University School of Medicine; Chief, General Medical Service, Veterans Administration Hospital, Washington, D. C.

be considered as belonging in the same category. These are thromboangiitis obliterans, erythema nodosum and multiforme, anaphylactoid (Henoch's and Schönlein's) purpura, Löffler's pneumonia, and serum sickness.

At first glance, there appears to be little relationship, clinically, among this variegated group of diseases. Yet recent observations have indicated that the manifestations of these disorders frequently overlap. For example, in several autopsy studies of rheumatoid arthritis, valvular heart lesions indistinguishable from those of rheumatic fever have been described in 25 to 65% of cases. Furthermore, in the early stages of rheumatoid arthritis, the inflammation of the joints may closely resemble that of acute rheumatic fever. In fact, nonsuppurative joint involvement appears to be a common denominator among the collagenous diseases. Similarly, Raynaud's phenomena, erythematous and purpuric skin lesions, inflammation of the serous membranes, cardiac and renal involvement, and pulmonary lesions occur with many of these disorders.

Rich, as well as other observers, has presented clinical and experimental evidence that hypersensitivity to bacterial and other proteins, and possibly also to simple organic and inorganic compounds, may be important in the development of the collagen diseases. Lesions similar to those seen in patients with periarteritis nodosa or rheumatic fever have been found to develop in rabbits injected with horse serum. Also, with hypersensitive reactions to sulfonamides, aspirin, iodine, thiourea, or dilantin or in patients who have died with serum sickness, lesions resembling acute periarteritis nodosa have been noted. However, in spite of these observations, the allergic basis for the collagen diseases has not yet been completely accepted.

Gross Pathologic Features

The salient clinical features of each of the collagen diseases are listed in the accompanying table. The gross pathologic findings may be described briefly as follows:

Disseminated lupus erythematosus—An erythematous macular eruption over the nose and cheeks is characteristic of this disease. The pleura, pericardium, peritoneum, and joints are thickened and often the site of effusions.

Moderate splenomegaly and lymph node enlargement are common. Verrucous endocarditis, involving the valves and adjacent endocardium (Libman-Sacks disease), is frequently found in the heart. The so-called wire-loop lesion in the glomeruli of the kidney, caused by thickening of the capillary basement membranes, is pathognomonic.

Periarteritis nodosa—The small arteries and the arterioles in the kidney, heart, peripheral nerves, muscle, gastrointestinal tract, and other visceral organs are involved in this disorder. Infarction and hemorrhage are common. Splenomegaly, enlargement of lymph nodes, and serous effusions occur occasionally.

Scleroderma—This disease usually begins in the extremities and face, with later extension to the trunk. The skin becomes atrophic, and the subcutaneous tissues are thickened and fibrotic. Involvement of the tongue, esophagus, heart, lungs, and kidneys is often observed.

Dermatomyositis—Areas of inflammation in the muscles and overlying skin are characteristic of dermatomyositis. Subcutaneous edema of the face, trunk, or extremities is often present. In addition to the skeletal muscles, those of the orbit, pharynx, larynx, and diaphragm may become involved. The skin changes of scleroderma may also develop.

Rheumatoid arthritis—The alterations in the joints with this disorder include edema and inflammation, proliferation of the synovial membranes, destruction of the cartilage, resorption of bone, and ankylosis. Lymphocytic infiltrations in the muscles, particularly about the blood vessels, are commonly found.

Valvular lesions similar to those of rheumatic fever are often observed at autopsy. Uveitis and episcleritis have been described in a few cases.

Rheumatic fever—The Aschoff body is the pathognomonic histologic lesion of rheumatic fever and consists of a minute nodule of swollen collagen surrounded by collections of lymphocytes, with a centrally located large multinucleated cell. The lesions appear chiefly in the heart, joints, and brain, but also in the lungs, abdominal viscera, and serous membranes.

In the heart, pancarditis is usually present, with fibrosis of the mitral, aortic, and, occasionally, the tricuspid valves as a

CLINICAL FEATURES OF

Disease	*Sex*	*Constitutional*	*Skin*	*Joints*	*Heart*
DISSEMINATED LUPUS ERYTHEMATOSUS	Predominant in females	Chronic Fever Weight loss	Butterfly eruption on face Telangiectasia Petechiae Indurated nodules	Pain Swelling	Tachycardia Systolic murmur Pericarditis
PERIARTERITIS NODOSA	Predominant in males	Chronic Fever Weakness Weight loss Peripheral neuritis	Subcutaneous nodules Erythema Purpura	Pain Swelling	Hypertension Tachycardia Pericarditis
SCLERODERMA	Equal	Chronic Often mild Often starts with Raynaud's phenomena	Waxy Adheres to underlying tissue Decreased sweating Face masklike Tongue thick	Motion limited by skin changes	Occasional myocardial fibrosis
DERMATOMYOSITIS	Equal	Chronic Often mild	Subcutaneous edema Erythema Muscles tender, stiff, weak	Rarely involved	Rarely involved
RHEUMATOID ARTHRITIS	Predominant in females	Chronic Remitting Fatigue Mild fever Weight loss	Atrophy Liver-palms Subcutaneous nodules	Pain Swelling Deformity	Clinically rarely involved Valvular lesions of rheuamtic fever in 25 to 65% of autopsies
RHEUMATIC FEVER	Equal	Acute Fever Epistaxis Chorea in childhood	Subcutaneous nodules Erythema marginatum	Migratory arthritis	Tachycardia Endocarditis Myocarditis Pericarditis Systolic and diastolic murmurs

COLLAGEN-VASCULAR DISEASES

Lungs	*Abdomen*	*Kidneys*	*Blood*	*Prognosis*	*Treatment*
Pleurisy Effusion	Pain Ascites Palpable spleen Anorexia Vomiting	Albuminuria Hematuria Reduced function	Anemia Leukopenia Thrombopenia Elevated sedimentation rate and serum globulin Albumin depressed L.E. cells in bone marrow	Fatal in 1 to 2 years Intercurrent infection, heart failure, or uremia	Rest Nutrition Transfusions Salicylates Avoid sunlight ACTH or cortisone
Asthma Cough Hemoptysis Pleurisy Pneumonitis	Pain Vomiting Melena	Albuminuria Hematuria Reduced function	Anemia Leukocytosis Eosinophilia Increased serum globulin, decreased albumin	50% recover Others die in 1 to 2 years with heart failure or uremia	Rest Nutrition ACTH or cortisone in early stages
Dyspnea from impaired chest motion	Dysphagia from esophageal involvement	Normal	Slight anemia White blood count normal	Generally good 10 to 20% die from inanition or intercurrent infection	Physiotherapy Thyroid Vitamin D Para-amino-benzoic acid ACTH or cortisone in early stages
Normal	Normal	Creatinuria	Eosinophilia Slight anemia White blood count normal Increased sedimentation rate	Fatal in 50 to 60% in 1 to 2 years from respiratory muscle involvement and intercurrent infection	ACTH or cortisone may produce long remissions
Normal	Normal	Normal	Mild anemia White blood count normal or slightly elevated Sedimentation rate normal or slightly elevated	Morbidity high Mortality low	Rest Physiotherapy Gold Salicylates ACTH or cortisone may control symptoms
Pneumonitis Pleurisy	Attacks of pain	Normal	Leukocytosis Anemia Elevated sedimentation rate	About 5% die in acute phase with myocarditis Chronic valvular disease may lead to heart failure	Rest Salicylates ACTH or cortisone may control acute phase

CLINICAL FEATURES OF

Disease	*Sex*	*Constitutional*	*Skin*	*Joints*	*Heart*
THROMBOANGIITIS OBLITERANS	Predominant in males	Chronic Associated with smoking tobacco Involves lower extremities	Erythema over involved vessels	Normal	Normal
ERYTHEMA NODOSUM	Predominant in females	Acute Fever	Discrete areas, most common on lower legs Red, indurated, warm, tender	Arthralgia	Normal
ERYTHEMA MULTIFORME	Equal	Acute Malaise Fever Coryza Cough	Widespread macular, papular, vesicular, or bullous lesions in skin and mucous membranes	Normal	Normal
ANAPHYLACTOID PURPURA	Equal	Acute Fever Malaise	Crops of hemorrhagic and urticarial lesions	Swelling Pain Hemorrhage	Normal
LÖFFLER'S PNEUMONIA	Equal	Acute Fever Cough	Normal	Normal	Normal
SERUM SICKNESS	Equal	Acute 5 to 9 days after serum injection	Urticaria Lymphadenopathy	Arthralgia	Normal

late sequela. In the joints, the synovia and periarticular tissues become transiently edematous and inflamed.

Thromboangiitis obliterans—This disease involves the small arteries and veins of the extremities. The lesions are granulomatous and usually segmental, with normal portions of vessel between. In severe cases, gangrene is not uncommon. Thrombosis of the mesenteric, renal, coronary, or cerebral vessels may occur.

Erythema nodosum—The eruption in this condition tends

COLLAGEN-VASCULAR DISEASES—*(continued)*

Lungs	*Abdomen*	*Kidneys*	*Blood*	*Prognosis*	*Treatment*
Normal	Rarely involved	Normal	Normal	May result in gangrene of extremities	Abstinence from tobacco Rest Vasodilators ACTH or cortisone of doubtful value
Hilar nodes may be enlarged	Normal	Normal	Normal	Disappears in 2 to 3 weeks Occasional recurrence	ACTH or cortisone in severe cases
Normal	Normal	Normal	Normal	Recovery in 2 to 3 weeks	Symptomatic ACTH or cortisone in severe cases
Normal	Colicky pains Melena	Occasional hematuria, proteinuria, and reduced function	Leukocytosis Eosinophilia Platelets normal	Recovery in 1 to 6 weeks	Symptomatic ACTH or cortisone in severe cases
Extensive infiltrations	Normal	Normal	Marked eosinophilia	Recovery in few days	ACTH or cortisone produces rapid clearing
Asthma	Pain Nausea Vomiting	Normal	Normal	Recovery in few days	Ephedrine Epinephrine Intravenous procaine ACTH or cortisone in severe cases

to occur in crops, most frequently over the lower extremities, but may appear over any part of the body. The lesions are circular, red, raised, thickened, warm, and exquisitely tender. They disappear after several days, but may recur. Arthralgia frequently accompanies erythema nodosum.

Erythema multiforme—As the name implies, the lesions of erythema multiforme are quite variegated and may be macular, papular, vesicular, or bullous. Occasionally an iris pattern is seen, with two or three concentric rings of discoloration.

The eruption occurs most frequently on the extensor surfaces of the hands and feet but may involve the palms, soles, extremities, trunk, and face. Lesions in the mouth, conjunctiva, urethral meatus, and glans penis or vulva (Steven-Johnson syndrome) develop in about one-third of cases. Secondary infection and necrosis of the areas are common.

Anaphylactoid purpura—The manifestations of this disorder are erythema, urticaria, hemorrhage, and edema, which may appear in the skin (Schönlein's purpura), joints, gastrointestinal tract (Henoch's purpura), or kidneys. The lesions show perivascular infiltration with polymorphonuclear and eosinophilic leukocytes, hemorrhage, and swelling of the collagen tissue.

Löffler's pneumonia—This is an acute disease characterized by extensive eosinophilic infiltrations in the lungs and a pronounced eosinophilia in the blood.

Serum sickness—This condition usually develops five to nine days after the administration of a foreign serum and is characterized by fever, urticaria, arthralgia, lymphadenopathy, and edema. Typical vascular and fibrous tissue changes are found in patients who die during such episodes.

Treatment

The recognition of the collagen diseases has assumed considerable importance since the observation that the administration of ACTH or cortisone may block the tissue reactions and ameliorate or completely eliminate the clinical manifestations.

These agents do not cure the disorders as long as the etiologic factors exist or are active. However, the disabling symptoms may be controlled in many instances by careful use of these potent hormones until spontaneous recovery occurs.

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Cavitary Coccidioidomycosis

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Tulare-Kings Counties Joint Tuberculosis Hospital, Springville, Calif.

PATIENTS with residual coccidioidal cavities do not transmit the disease and the condition never progresses to fatal dissemination. The prognostic and public health import of these facts makes differentiation from tuberculosis important.

Possibility of coccidioidomycosis should be considered when pulmonary lesions are noted, if the patient has been in an endemic area. Despite difficulty of demonstrating the causative agent, repeated bacteriologic study of sputum and pus, biopsy when possible, and skin testing and complement fixation should be done.

Coccidioidomycosis is the outstanding problem among pulmonary mycoses in western United States, where the condition is often called San Joaquin fever. *Coccidioides immitis* produces a fluffy mycelial growth containing chlamydospores, which are very light and easily blown about by the winds and dust storms of the dry season. These infectious organisms enter the respiratory tract and produce primary coccidioidomycosis. The patient recovers from the acute infection and is immune to exogenous reinfection.

Coccidioidal granuloma, or disseminated coccidioidomycosis, however, is a continuous, progressive endogenous process following the initial infection of a susceptible person. Associated with a 60% mortality rate, this form of the disease occurs in 0.25% of white patients, but is 10 times more common among the dark-skinned races.

The treatment of primary coccidioidomycosis involves bed rest with careful supervision until roentgen evidence of acute pneumonitis has cleared, the sedimentation rate has returned to normal, the complement-fixation titer has fallen, and precipitins have disappeared. Precautions should be increased for patients of dark-skinned races.

Pulmonary coccidioidal disease tends to leave residua, such as solid foci, coccidioma, cavitation, persistent hilar adenopathy, calcification, and, less often, localized bronchiectasis and fibrosis. The cavities vary from 1 to 14 cm. and produce hemoptysis in 65% of patients, but otherwise few signs or symptoms. Isolation is not necessary, since the disease is not transmitted from one person to another.

Studying cavities of 92 patients, William A. Winn, M.D., found that 25% closed spontaneously, 10% persisted for years without evident harm, 6% filled and formed a nodule resembling a neoplasm, and 2% progressed to transpleural rupture and spontaneous pneumothorax, with or without empyema. One-third, because

* Pulmonary mycoses—coccidioidomycosis and pulmonary cavitation. Arch. Int. Med. 87:541-550, 1951.

of either excessive bleeding or increasing size of the cavity, required closure by simple collapse measures, such as pneumothorax or pneumoperitoneum. These measures were effective in 18 instances and failed in 10.

Some of the smaller cavities with fairly thick or firm walls are excised surgically while larger lesions need more extensive measures such as segmental lobular resection, lobectomy, or even pneumonectomy. New cavities may develop in the remaining expanded lung.

Surgical treatment rather than simple collapse should be employed for peripheral cavities because of the danger of rupture and spontaneous collapse.

Positive Sputum Without Pulmonary Tuberculosis

LOUIS SCHNEIDER, M.D., AND DANIEL WIDELOCK, PH.D.*

Approximately 1% of sputa examined directly for tubercle bacilli contains acid-fast organisms of no clinical significance. The discovery of these organisms frequently results in false diagnosis of tuberculosis.

Awareness of this pitfall is the responsibility of the clinician, not the laboratory, explain Louis Schneider, M.D., and Daniel Widelock, Ph.D., of the New York City Health Department.

The usual methods of staining and microscopic examination do not differentiate the tubercle bacillus from other acid-fast organisms. Demonstration of *Mycobacterium tuberculosis* requires culture or animal inoculation. Saprophytes are the organisms most commonly indistinguishable by microscopic examination from tubercle bacilli. Upon cultures, the saprophytes can be distinguished from tubercle bacilli by differences of growth rates and colony characteristics. This requires four to six weeks.

When acid-fast organisms are reported in the sputum of a patient who seems healthy by clinical examination and whose chest films are normal, further laboratory or roentgen studies may be done. When tuberculosis is suspected and not plainly detectable on conventional 14 by 17 films, apical, lordotic, and even tomographic studies are valuable. Lateral and oblique views reveal lesions hidden by heart shadows. Rarely, a tuberculous ulcer may be in the upper respiratory tract.

Coexistence of tuberculosis with bronchial carcinoma or a pathogenic fungus offers considerable difficulty in diagnosis. When a patient raises copious amounts of sputum, tubercle bacilli will be found consistently if the disease is tuberculous.

* "Positive sputum" without pulmonary tuberculosis. Am. Pract. 2:428-433. 1951.

Mercuric Bichloride Poisoning

PHILIP TROEN, M.D., SEYMOUR A. KAUFMAN, M.D.,
AND KERMIT H. KATZ, M.D.*
Boston City Hospital

PERSONS who have taken mercuric bichloride can usually be saved if no urinary abnormalities appear within forty-eight hours or if the urinary output remains good for three days in spite of renal damage. Immediate administration of BAL and prompt gastric lavage are the best therapeutic measures.

Coffin-shaped tablets of mercuric bichloride used for disinfectant solutions are readily available to the public and are a rather popular means of suicide. Suicidal intentions were responsible for 44 of 54 cases of such poisoning over a thirteen-year period at the Boston City Hospital, report Lt. Philip Troen, M.C., A.U.S., Lt. Seymour A. Kaufman, M.C., U.S.A.F., and Kermit H. Katz, M.D. The mortality rate was 18%.

A tablet of mercuric bichloride is absorbed from the stomach in about ten minutes. Excretion of the metal begins soon after ingestion and takes place through the large bowel, kidney, liver, gastric mucosa, salivary glands, and skin.

In the alimentary canal, the effects are nonspecific, consisting mainly of corrosion and of epithelial necrosis.

In the kidneys, a severe necrotizing nephrosis occurs, with destruction of the proximal convoluted tubules; the glomeruli, however, are spared.

Death within forty-eight hours results from severe hemorrhagic necrosis of the upper gastrointestinal wall. The necrotizing nephrosis produces death within two to seven days; patients dying after this time show evidence of regeneration of the renal lesion.

After ingestion of corrosive sublimate, a few patients have no symptoms, but gastrointestinal disorders usually appear, varying from slight gastritis to severe necrotizing ulceration of the mucosa. Hematemesis and melena are prominent manifestations. Patients with renal involvement invariably also have severe gastrointestinal symptoms.

Renal disease appeared in 18 of the 54 patients and 9 of the 18 died within one to three weeks. The urine cleared rapidly in the other cases; the output was not appreciably decreased. Among the fatal cases, anuria developed in a few hours to three days after poisoning. Regeneration from tubular damage began on the eighth day, and recovery frequently ensued from the ninth to the twelfth day.

Although a definite correlation between dosage and mortality does not exist, the smallest lethal amount was 2 gm. Dosage that produced anuria

* Mercuric bichloride poisoning. New England J. Med. 244:459-463, 1951.

was higher than that causing urinary changes without altered urinary output.

Emesis and immediate gastric lavage, if given early enough, are helpful in deterring absorption of the tablet, but are usually not feasible because of the conditions under which the poison is taken.

BAL, by preventing disruption of the tissue enzyme systems through the formation of an easily excreted metal-BAL complex, is most effective when administered early and in adequate dosage. The initial dose is 5 mg. per kilogram of body weight, followed in one to two hours by half that amount. A second dose of 2.5 mg. per kilogram is administered two to four hours later. In severe cases, a third similar dose is given within the first twelve hours. The next day, the patient receives 2 doses of 2.5 mg. per kilogram and, on the third day, 1 such dose.

In individual cases, dialysis may be indicated. Important in treatment of acute renal insufficiency is careful attention to fluid and electrolyte balance. Forcing of fluids for anuria may do actual harm by inducing acute pulmonary edema and death.

Some sulfur-containing compounds react with mercury to form a nontoxic, readily excreted substance but, with the possible exception of sodium formaldehyde sulfoxylate, no efficacy has been demonstrated for any of these compounds. Cecostomy, colonic irrigation, massive fluid therapy, renal decapsulation, and exsanguination transfusions are all ineffective.

¶ THYROID FUNCTION is depressed by doses of desiccated glandular tissue, but even prolonged medication causes no permanent harm. Monte A. Greer, M.D., of Tufts College, Boston, studied reactions in healthy people by means of radioactive iodine. In most cases, glandular activity was much reduced by 1 to 3 gr. of thyroid per day. After therapy ceased, function usually returned to normal within two weeks but, occasionally, not for six to eleven weeks. Recovery was equally rapid whether medication had continued for days or years.

New England J. Med. 244:385-390, 1951.

¶ CONTROL OF GASTROINTESTINAL HEMORRHAGE may be facilitated by ingestion of cream. In addition to a local hemostatic effect, the cream decreases the clotting time of blood. Jerome M. Waldron, M.D., Barkley Beidelman, M.D., and Garfield G. Duncan, M.D., determined coagulation times of 100 persons before and after ingestion of 60 cc. of cream. Within the first half-hour after feeding, the clotting time is reduced about one-third; at the end of an hour, the drop is about 44%. The increased coagulability persists for three hours.

Gastroenterology 17:360-366, 1951.

Diagnosis of Peripheral Bronchogenic Cancer

JOHN H. MOYER, M.D., AND ALFRED J. ACKERMAN, M.D.*
Baylor University, Houston

CARCINOMA of the peripheral bronchi and bronchioles produces relatively few symptoms before metastasis.

As with other pulmonary lesions, complete roentgenographic studies are essential. However, according to John H. Moyer, M.D., and the late Alfred J. Ackerman, M.D., roentgenographic and collateral studies of bronchogenic cancer are often inconclusive, and diagnostic thoracotomy is frequently necessary.

On the basis of gross morphologic and clinical manifestations, bronchogenic carcinoma of peripheral origin is classified as distinct from cancer of the major bronchi. The central type is about 3 times as common as the peripheral.

Peripheral carcinoma may be confined to respiratory passages without eroding the involved bronchus and is termed alveolar cell carcinoma. More frequently, the lesion is produced by early erosion of the bronchus and expansive growth within pulmonary parenchyma.

Such carcinomas usually occur as a circumscribed mass, homogeneous, and with soft tissue density. Even when increasing in size, the lesions usually have sharp contours, although occasionally, instead of being sharply demarcated, the carcinomas will extend along the peribronchial lymphatics, producing lymphatic carcinomatous extension.

Significant symptoms are not noted early in these cases because the large bronchi are not occluded, mediastinal structures are not altered, and displacement from atelectasis or pressure is rare.

Peripheral circumscribed carcinoma is frequently difficult to differentiate from pulmonary vascular and chronic inflammatory lesions if ordinary symptoms and roentgenographic manifestations are used for evaluation.

Laminagraphy not only helps in the diagnosis, but will also aid in differentiating other diseases of similar density in regular chest roentgenograms.

Laminagraphic studies may confirm the solid nature of an infiltration and reveal calcification not visible on the chest films. Such studies, with a carefully taken history and coccidioidin skin tests, indicate or eliminate the possibility of pulmonary coccidioidomycosis.

Cardibangiography is valuable in differentiating circulatory from neoplastic lesions and may clarify a confusing diagnostic problem by demonstrating a vascular lesion such as pulmonary arteriovenous fistula.

Pleural effusion occurring in bronchogenic carcinoma increases difficul-

* Bronchiogenic carcinoma as a differential diagnostic problem in pulmonary disease. Am. Rev. Tuberc. 63:399-416, 1951.

ties of roentgen diagnosis by obscuring sharp delineation of neoplastic lesions against uninvolved portions of the lung. In such cases, thoracentesis and pneumothorax permit demonstration of primary bronchogenic tumor by body-section roentgenography.

Diagnostic pneumothorax may also add essential information for differentiating intrathoracic extrapulmonary tumors, such as neurofibroma and pleural mesenchymoma, from intrapulmonary lesions.

Solitary metastatic carcinoma of the lung may present roentgenographic changes closely resembling peripheral bronchogenic carcinoma. When the primary site is not evident, thoracotomy is required.

Chin Support for Anesthesia

A. P. BALTHASAR, D.A.*

To free the anesthetist's hands from the purely mechanical act of supporting the patient's jaw, A. P. Balthasar, D.A., of St. Vincent's Hospital, Sydney, Australia, has devised a simple holder. All that is required is an inelastic bandage, 8 ft. long and 2 in. wide, and a piece of adhesive tape.

After the mask is placed over the patient's face, the middle of the bandage is fastened under his chin by a strip of adhesive tape running from the center of the mask down the middle of his neck. The bandage is then run around both sides of the face and looped over to form a slipknot on the forehead. The two ends are taken vertically down over the head of the operating table and tied to any convenient anchoring point beneath.

When tension is applied to the ends of the bandage, the point of the chin is carried forward and up, with immediate freeing of the airway. In addition to keeping the bandage in place, the adhesive tape helps hold the lower rim of the mask tight to the jaw.

The bandage may also be used under an open mask.

* A simple chin support for anaesthesia. M. J. Australia 1:217, 1951.

Repair of Sliding Hiatal Hernia

P. R. ALLISON, F.R.C.S.*
Leeds, England

THE syndrome of heartburn, gastric flatulence, and postural regurgitation is produced by reflux esophagitis.

This condition is the result of incompetence of the gastroesophageal junction, usually from a sliding hernia of the stomach through the esophageal hiatus of the diaphragm into the posterior mediastinum. P. R. Allison, F.R.C.S., repairs the abnormality by returning the stomach to the anatomic location beneath the diaphragm, tacking the organ in place, and then lightly suturing together the enlarged hiatus in the right crus of the diaphragm behind the esophagus.

At the esophagogastric junction, the alimentary canal bends forward and to the left. The bend is lassoed and kept in place by the right crus of the diaphragm attached to the lumbar spine. An esophageal hiatus is a split in the muscle fibers of the right crus, lightly reinforced by fibers from the left. Contraction of the crus compresses the esophagus and increases the angulation, preventing reflux of gastric contents. If the hiatal opening is enlarged by pressure, the increase occurs posterior to the esophagus, in line with the fibers of the crus. Angulation of the esophagus is thus diminished, and regurgitation occurs.

Hiatal hernias are of two main varieties, the paraesophageal or rolling, and the sliding. Symptoms and prognosis differ for the two kinds.

The fascia on the deep surface of the diaphragm is reflected onto the esophagus as the phrenoesophageal ligament and fascia propria, with gastric vessels and lymphatics lying between the fascia and the peritoneal reflection. In development, a peritoneal sac covered by fascia is occasionally left behind in the hiatus anterior to the esophagus (Fig. 1*a*). The sac may remain empty during life or, at any age, a part of the anterior surface of the stomach may intrude, if the ligaments of the cardia still remain strong, and form a paraesophageal hernia (Fig. 1*b*).

However, since the esophagus still enters the stomach at an acute angle, regurgitation is prevented. Esophagitis with esophageal ulcers and heartburn does not develop, but the patient may have sensations of fullness after meals, precordial pressure, palpitations, shortness of breath, and peptic ulcers of the stomach.

If no hernial sac exists, but the muscles and ligaments at the cardia are weakened, a sliding hiatal hernia results (Fig. 1*c*). The acute angle between the esophagus and stomach disappears and the cardia slides up into the mediastinum, carrying along

* Reflux esophagitis, sliding hiatal hernia, and the anatomy of repair. Surg., Gynec. & Obst. 92:419-431, 1951.

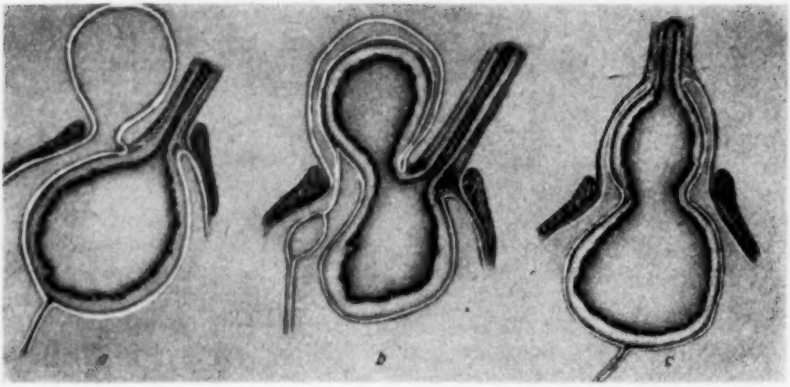


Fig. 1. Stomach may intrude into preformed sac or slide into hiatus.

the elongated phrenoesophageal ligament and peritoneal reflection. The elastic esophagus recoils and appears shortened.

Regurgitation of digestive juices follows with superficial esophagitis, and the patient has heartburn. The regurgitation may progress until previously eaten food is brought up into the mouth. Many variations of symptoms occur, depending upon the degree of hernia.

Without surgical treatment, the condition may deteriorate to chronic ulceration, submucous fibrosis, and stricture. If fibrosis renders the hernia irreducible, resection of a fibrous and ulcerated esophagus is necessary, a much more formidable procedure than repair of the previous hernia.

Among 113 cases of sliding hernias without stenosis, the occurrence was almost 4 times as frequent for women as for men; the number with stenosis was about equally divided.

Roentgenograms with the patient in the Trendelenburg position are necessary for diagnosis of the hernia. Pressure is applied to the abdomen, and the herniated part of the stomach is distended with barium and easily demonstrated. Direct esophagoscopy shows that the mucous membrane is inflamed and often unusually redundant because of the elastic recoil and shortening of the muscular wall of the esophagus. Ulcers may be seen in the lower third. The esophagoscope passes from the gullet into a lax and patulous cardia without deviation and without obstruction from the diaphragmatic pinchcock.

Repair of the hernia includes dividing the elongated phrenoesophageal ligament and peritoneal reflection, suturing the cut edges to the under surface of the diaphragm, and moving the cardia to the normal location (Fig. 2). Application of the vertical fibers of the right crus to one another behind the esophagus restores the hiatal opening.

The left side of the chest is opened through the bed of the eighth or ninth rib, and the posterior medias-

tinum, the left phrenic nerve, and the solar plexus are infiltrated with local anesthetic. The posterior mediastinal pleura is incised from about the level of the inferior pulmonary vein to the top of the diaphragm. The incision passes forward over the top of the hiatus to the pericardium and backward over the aorta on to the spine.

The esophagus is isolated just above the cardia and retracted with a tape (Fig. 3*a*). The vagus nerves are left intact.

A radial incision 2½ in. long is then made in the left dome of the diaphragm just in front of the spleen, half in the muscular and half in the tendinous part, but not involving the muscle around the hiatus. Sutures are passed through the edges of the incision for hemostasis and traction.

The first and second fingers of the left hand may then be introduced through the incision in the diaphragm into the peritoneum, and passed upward through the hiatus to lie between the stomach and the gastric coverings. With the fingers as a guide, the coverings are incised around the front and two sides of the stomach, ¾ in. below the cardia (Fig. 3*b*). The excess, together with any retroperitoneal fat lying in the hiatus, may be excised. The tape around the esophagus is passed down through the hiatus and brought out again through the diaphragmatic incision. Traction on the tape reduces the hernia so that the cardia lies below the diaphragm (Fig. 3*c*).

The posterior vertical part of the diaphragm is displaced forward to display and clean the crural fibers (Fig. 3*d*). The cut edges of the peritoneum and phrenoesophageal ligament, with the intervening tissue, are caught up by four or five interrupted silk sutures, and fixed to the under aspect of the diaphragm in front and on the left side of the cardia. The tape around the cardia is removed, and the stomach should lie in the natural position without any other fixation.

The esophagus is then moved forward and the crural fibers are approximated behind it with one, or at most two, silk sutures, tied lightly so as to approximate but not strangle the muscle fibers. Fasciae on the

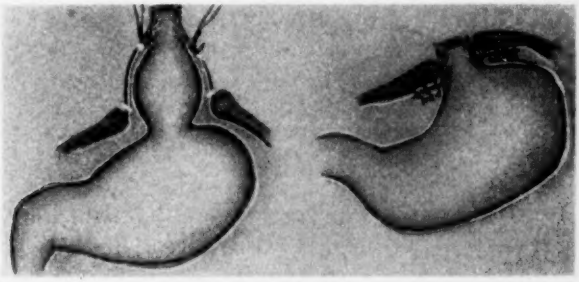


Fig. 2. Ligament divided and sutured to inferior diaphragm

Steps in Reduction of Hiatus Hernia

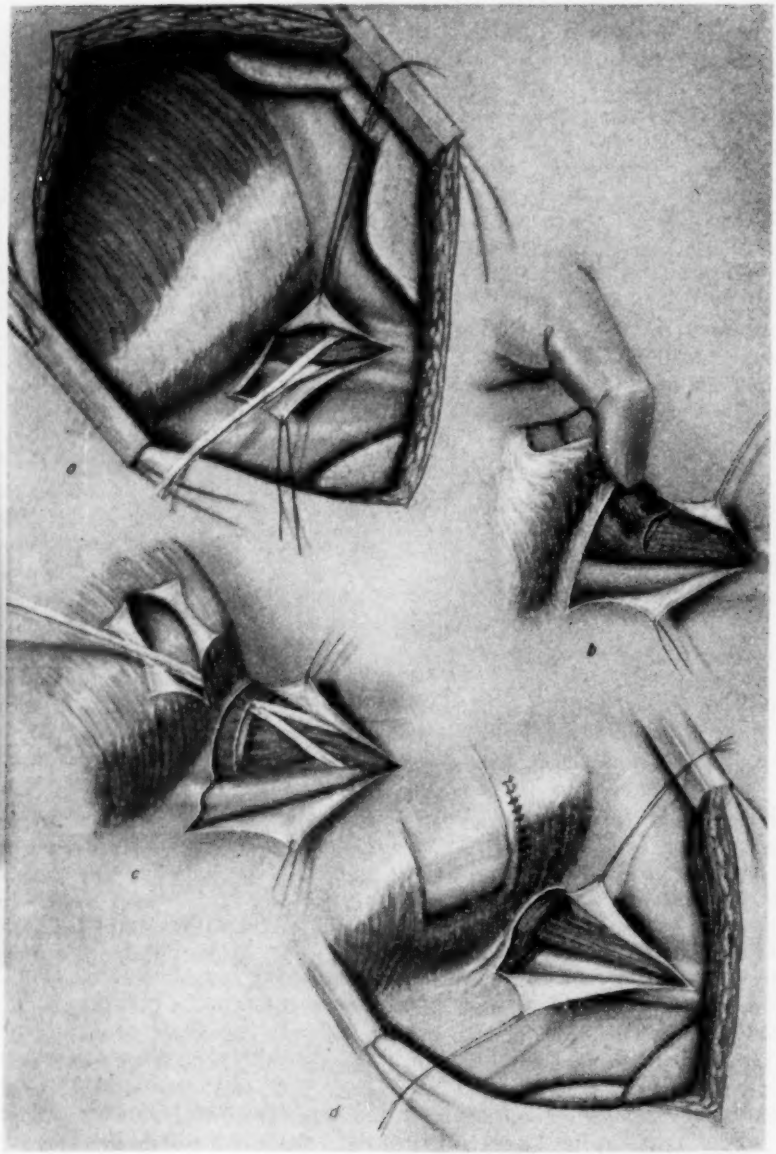


Fig. 3. Traction on tape around esophagus restores cardia to position.

thoracic side of the crura are sutured together firmly from side to side, incorporating the cut edges of the pleura close to the esophagus.

The diaphragmatic incision is closed with interrupted silk stitches, and the chest wound shut in layers. An underwater tube is placed to pass obliquely out through the wound. This is removed if a roentgenogram taken on the operating table shows both lungs fully expanded.

Management of Familial Polyposis of the Colon

ROBERT R. ANSCHUETZ, M.D.*

THE unfortunate individual with familial polyposis faces the prospect of dying from carcinoma of the large bowel, unless adequate surgical treatment is given.

Whenever possible, resection of the colon with anastomosis of the terminal ileum to the large bowel, retaining some portion of the rectum and an unimpaired anal sphincter, is preferred to the more drastic procedure of colectomy together with abdominoperineal excision of the rectum, asserts Robert R. Anschuetz, M.D., of Alton, Ill.

The conservative procedure, however, should be selected only if the following criteria can be met:

1] Carcinoma is not found in the rectum at the time of operation

2] The postoperative rectal segment will be amenable to complete proctoscopic visualization

3] The rectal segment can be completely cleared of polyps

4] Repeated examination of the rectal segment with biopsy and destruction of any new polyps can be done every three months for life.

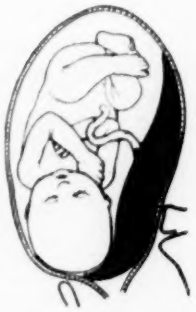
When these criteria are met, retention of the rectum permits the patient to lead a relatively normal existence. This advantage of an anal ileostomy is important because such patients frequently are treated in the first four decades of life, when marriage and domestic and social activities are paramount. The possibility of carcinoma developing in the rectal stump is a disadvantage. When treatment consists of colectomy with proctectomy, the threat of cancer is eliminated, but a permanent ileostomy is entailed.

With conservative operation, the type and level of anastomosis must be determined for each case from the standpoint of technical facility and existing pathology. Exactly when the degree of rectal involvement does not permit preservation of sphincter function is a matter for the surgeon's judgment.

* The management of familial polyposis of the colon. Surgery 29:532-559, 1951.

The Dangerous Placenta

JOHN STALLWORTHY, F.R.C.S.*
Oxford, England



PLACENTA previa attached to the posterior uterine wall but not extending to the os threatens mother and child.

Though almost beyond range of the examining finger, the mass often displaces the presenting part of the fetus and prevents engagement in the pelvic brim. Bleeding may be impossible to control by the vaginal route, and the low cord is likely to be compressed.

Placenta previa may be first suspected in the antenatal clinic because of a high presenting part, malpresentation, or bleeding. The provisional diagnosis is often confirmed or disproved by immediate radiology without admission to the hospital. Serious risks can thus be avoided. Diagnosis is almost 100% accurate, and the perils of a vaginal examination may be averted.

When the radiologic staff is not skilled in soft tissue placentography, a simple lateral film of the pelvis is helpful. The new technics without contrast media include a wedge-shaped aluminum filter and change of posture to show effects of gravity.

At least 20% of women with placenta previa may be admitted to the hospital before any bleeding occurs, and over 80% can be treated expectantly. About half will require cesarean delivery, with choice depending on relation of the presenting part to the pelvic brim, rather than on placental site with reference to the cervix. The membranes should be ruptured only if the presenting part will engage. Otherwise, rupture may lead to disaster for both mother and child.

John Stallworthy, F.R.C.S., believes that placenta previa should cause no maternal deaths and a fetal mortality of less than 10%, if adequate care is given. Of 245 cases observed in nine and a half years, 170 were diagnosed by actual sight or palpation. The posterior location was most common. Only 1 mother died, and in the last 100 cases, 88 of 102 infants survived.

When the diagnosis is verified, expectant treatment should be continued until the thirty-sixth or thirty-eighth week in a hospital equipped to deal with hemorrhage. Premature birth is the most serious fetal hazard and should be avoided.

Rh-compatible blood should be on hand, and the mother should stay in a double room or ward within reach of a bell. Anemia is corrected promptly, if necessary, by blood transfusion.

* The dangerous placenta. Am. J. Obst. & Gynec., 61:720-737, 1951.

Severe or recurrent bleeding may require immediate action, but less than 14% of cases need interference before the thirty-sixth week. On the other hand, the obstetric position may improve and allow vaginal delivery.

Particularly with an anterior placenta, the presenting part sometimes descends into the pelvis during the last weeks of pregnancy. When the maximum diameter is through the brim and the fetal heart is steady, the mother may return home to await spontaneous labor, with plans for hospital delivery.

A posterior placenta entails close watch of the child's heart. If the pulse becomes irregular as the head is gently pushed into the pelvic brim, either by abdominal manipulation or by uterine contraction, oxygen is given to the mother at once and cesarean section performed, whatever the relation of placenta to cervix.

If no sign of engagement is noted by the thirty-sixth to thirty-eighth week, preparations are made for cesarean section. In some cases the condition is determined by abdominal palpation; otherwise a vaginal examination is done on the operating table.

The object is to see whether the presenting part can be made to enter the brim, and not to find where the placenta is in relation to the os. A head of 9-cm. biparietal diameter and a thick low-lying placenta may cause major disproportion in a small pelvis and none at all in a larger type.

Fatal bleeding may result from inexperienced digital examination.

When the head can be made to enter the brim and seems stable, the forewaters are ruptured, and the baby's heart is closely watched until delivery. Lower segment section is sometimes necessary because of fetal distress or further hemorrhage before labor starts.

If the head cannot be inserted in the brim, cesarean delivery is undertaken at once. The lower segment technic is usually employed, but sometimes the classical operation with a low vertical incision will be applicable.

In rare cases, if the infant is dead, a bag or half breech procedure is done.

? THREATENED ABORTION does not predispose the fetus to congenital malformations. Thus, attempts to treat threatened abortions are not likely to increase the frequency of abnormal babies. Of 12,000 infants born at Evanston Hospital, 289 had congenital defects and only 110 of the abnormalities were of major types. Estimated instances of threatened abortion totaled at least 800. From these data, E. S. Burge, M.D., of Northwestern University, Chicago, concludes that a patient whose pregnancy survives a threat to abort has at least a 98.5% chance of delivering an infant without major or life-threatening defects.

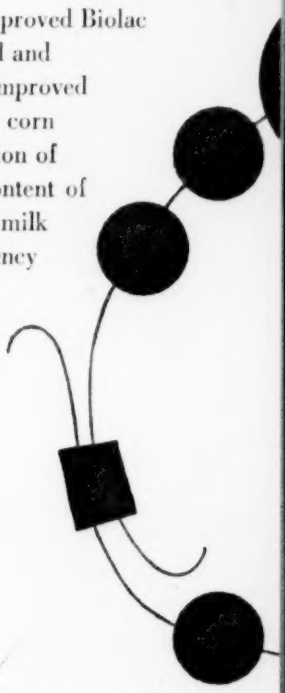
Am. J. Obst. & Gynec. 61:615-621, 1951.

applying the sum of today's knowledge

Recent advances in biochemical knowledge dictate a careful consideration of the composition of infant foods today. The New Improved Biolac answers fully to the requirements for infant nutrition now established, as two recent clinical studies indicate.[1,2]

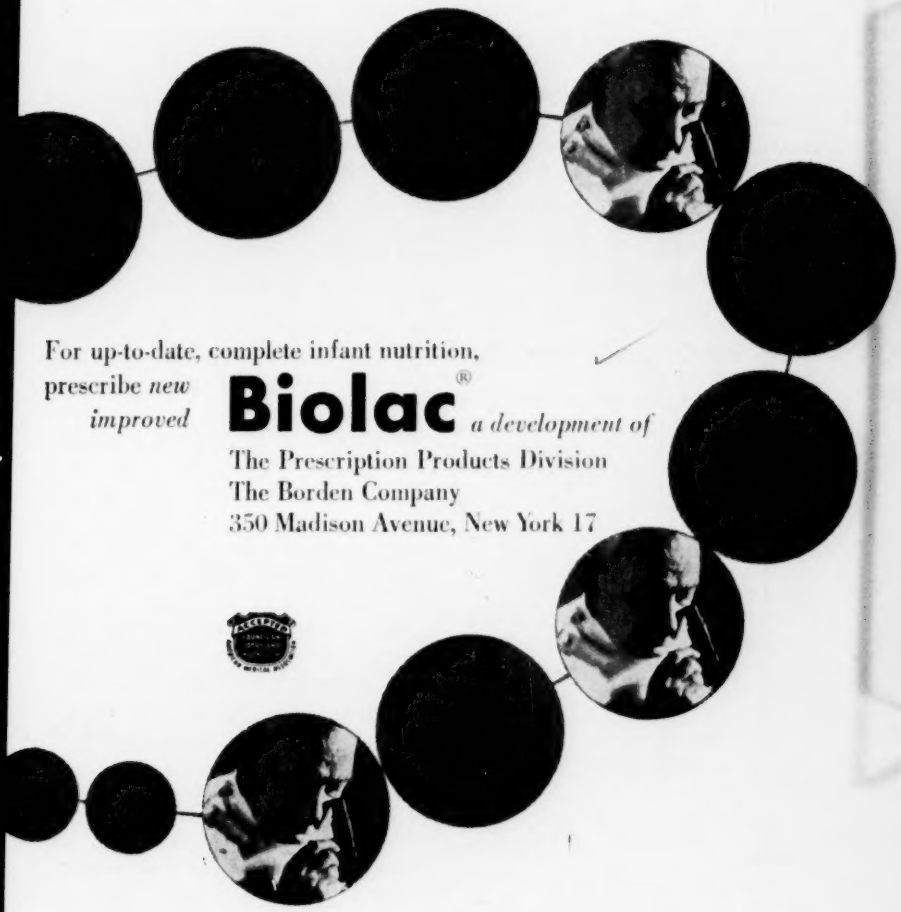
S. Hazard, Clement A. Smith, et al., find that the New Improved Biolac ensures satisfactory growth by physical, roentgenological and hematological standards.[1] Comparing infants fed New Improved Biolac with a group fed a standard evaporated milk and corn syrup mixture, they observe: "The differences in formation of hemoglobin, though slight, may reflect the high iron content of [Biolac], which is about ten times that of the evaporated milk mixture....The absence of rickets...indicates the sufficiency of vitamin D."

R. J. LaDriere and R. R. Burke[2] write: "The Biolac formula...meets the accepted essential requirements.... Adequate amounts of protein, carbohydrate, fat, minerals and vitamins (except vitamin C) are present. ...Infants appear to like the formula and grow and develop well." LaDriere and Burke also found results "suggestive of higher hemoglobin values in the Biolac group." They add: "None of the infants exhibited signs of rickets...at the age of six months."



1. Hazard, S.; Smith, Clement A., and Denton, F.: *J. Pediat.* 38:18, 1951.
2. LaDriere, R. J., and Burke, R. R.: To be published.

Biolac is prepared from: concentrated cow's milk in which most of the milk fat has been replaced with coconut oil, destearinated beef fat, and lecithin; dextrins-maltose-dextrose, lactose, sodium alginate, disodium phosphate, ferric citrate, vitamin B_1, and concentrate of vitamins A and D from fish liver oils. Homogenized and sterilized.



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Granuloma Inguinale of the Vulva

WALTER L. THOMAS, M.D.*
Duke University, Durham, N.C.

Tissue smears for diagnosis and streptomycin for therapy are the fundamentals in recognition and management of granuloma inguinale.

The condition must be differentiated from other diseases producing hyperplastic and hypertrophic lesions of the vulva—carcinoma, tuberculosis, blastomycosis, condyloma, acuminatum, syphilis, lymphopathia venereum, and chancroid. The demonstration of morphologically typical intracellular bacilli, *Donovania granulomatis*, establishes the diagnosis of granuloma inguinale.

DIAGNOSTIC TESTS

1. Darkfield examination (*Treponema pallidum* and fusospirochetes)
2. Serologic tests for syphilis
3. Ducrey bacillary skin test (chancroidal infection)
4. Direct smear, Gram's stain (*Hemophilus ducreyi*)
5. Culture for *H. ducreyi*
6. Biopsy for: [a] malignancy [b] condyloma acuminatum [c] tuberculosis [d] mycotic infections [e] tissue type [f] granuloma inguinale
7. Frei test
8. Frei test biopsy
9. Smear type biopsy for granuloma inguinale (superior)
10. Smears for inclusion bodies (herpes progenitalis)
11. Rabbit eye inoculation (herpes progenitalis)
12. Guinea pig inoculation (*Mycobacterium tuberculosis*)
13. Culture for *Myco. tuberculosis*
14. Tuberculin tests
15. Direct examination of material for fungi (*Actinomyces, Blastomyces, Candida*)
16. Fungus and bacteria cultures

A smear is prepared with material from the friable, granulating basal portion of the lesion. Small pieces of tissue obtained by biopsy forceps, rubbed between two glass slides, air dried, and stained at once with Wilson's or Wright's stain provide the diagnostic material. The staining time before dilution with distilled water should be slightly longer than for blood smears.

Combinations of vulvar diseases are common. A definite diagnostic routine is therefore essential for proper evaluation in each case. Walter L. Thomas, M.D., lists 16 laboratory tests that are applicable for differential diagnosis (see table).

Of 79 female patients, 16 to 70 years of age, with granuloma inguinale, 32 also had syphilis, 9 chancroid, 6 lymphopathia venereum, 3 condylomas acuminatum, and 1 vulvar carcinoma.

By no means all lesions are found on the vulva. Among the 79 patients, the vulva alone was affected in 47. Other sites in which lesions were observed were the vagina, inguinal

* A clinical study of granuloma inguinale with a routine for the diagnosis of lesions of the vulva. Am. J. Obst. & Gynec. 61:790-800, 1951.

regions, abdomen, buttocks, and mouth. The cervix alone was involved in 6 cases. One of these cases was initially mistaken for stage III carcinoma of the cervix. The error was corrected when biopsy revealed Donovan bodies.

Treatment with antimony compounds is giving way to more specific therapy with antibiotics. Streptomycin, 1 gm. intramuscularly every six hours for five days, produces complete healing in one to five weeks. Early diagnosis and effective therapy are important; 2 deaths reported among the 79 patients bear testimony to that statement.

Elephantiasic enlargement of the vulva has been surgically treated with vulvectomy.

Cutaneous Pregnancy Test

NINO FERRERO, M.D.*

THE colostrum skin test for pregnancy is greatly simplified by a disposable plastic microdispenser containing a standard dose. Results are read in an hour.

In a summary of 228 tests, Nino Ferrero, M.D., of the Woman's Hospital, Pasadena, Calif., estimates that pregnancy can be detected in 95% of cases and absence of pregnancy in 98%. More cases are required for definitive evaluation of the test.

Material for the injections is withdrawn by electric breast pump from primiparas in the twenty-eighth week of gestation, pooled, and prepared by the method of Falls, Freda, and Cohen.

The dispenser is a small disk with an upright fin, a flexible bulb containing 0.02 cc. of dilute sterile colostrum, and a fine needle parallel to the flat surface. Tests may be done twelve days to sixteen weeks after the first menstrual period is missed.

The instrument is held by the fin, the needle inserted just under the stratum corneum on the flexor aspect of the forearm, the bulb pressed, and the needle withdrawn before release. The wheal is circled by a pen or dermographic pencil to record size.

The site is inspected fifteen and sixty minutes later. Pregnant patients have a pearly, slightly enlarged wheal and little or no erythema at the first reading and no traces of either at the second.

In fifteen minutes, the nonpregnant subject has a much larger pearly wheal surrounded by irregular erythema 1 to 2 cm. in diameter. The halo disappears in an hour, but the wheal reddens, and inflammation commonly persists for several hours. Additional negative evidence is itching within five minutes after injection and a sense of warmth as erythema develops.

* The cutaneous pregnancy test. Am. J. Obst. & Gynec. 61:672-675, 1951.

Hyaluronidase for Children

JOSEPH SCHWARTZMAN, M.D.*
New York Medical College, Brooklyn

FLUID absorption is greatly facilitated by hyaluronidase. Subcutaneous clysis using the enzyme is 5 to 14 times more effective than ordinary clysis.

Though not to be considered a replacement for intravenous therapy, hyaluronidase provides the next fastest means of administering fluids and may obviate intravenous administration if employed early enough. Moreover, hyaluronidase has many advantages over intravenous therapy, particularly for pediatric practice in outlying districts where hospital facilities are not readily available.

Hyaluronidase can be given at home or in the field or ambulance without elaborate apparatus or experienced personnel. Administration can be started immediately and discontinued or restarted at any time without danger of clotting or emboli. Since pain is less than with intravenous injection and the method is particularly adapted to small veins, the enzyme is especially suitable for small children.

Hyaluronidase toxicity is low, but about 1% of patients are sensitive to the enzyme. No spread of localized infection occurs if the drug is not injected into the infected area.

Possibility of hyaluronidase entering the blood stream directly during hypodermoclysis need not be feared since the material has been injected intravenously without harmful effect, according to Joseph Schwartzman, M.D.

After the patient has been found insensitive to the enzyme by a skin test, ordinary gauge hypodermic needles are inserted into the sites selected. The clysis is started, and 5 to 10 cc. of fluid is permitted to flow through each side. Then 500 viscosity units of hyaluronidase, dissolved in 1 cc. of distilled water, are injected into the lumen of each rubber tube, about 1 in. from the junction with the needle. The clysis is permitted to run freely at the rate desired, usually 150 to 200 cc. per kilogram of body weight for twenty-four hours.

The same area can be used effectively for about three days. The needle site should be changed every third day to prevent local inflammation.

Hyaluronidase may fail to increase absorption in patients who have very low total plasma proteins. Action of the enzyme is hindered by salicylates.

The material is effective in facilitating the absorption of plasma given subcutaneously. The plasma should be diluted with equal parts of saline. Hyaluronidase is useful in intramuscular dye injections for pyelography, in local anesthesia for surgery, and in the treatment of sinus conditions with penicillin.

* Hyaluronidase in pediatrics. New York State J. Med. 51:215-221, 1951.

Breast Feeding

MILTON I. LEVINE, M.D.*

New York Hospital-Cornell University Medical Center, New York City

Success of breast feeding depends chiefly on the attitude of the mother and on the encouragement of the physician and nurses, rather than on the mother's physical qualifications.

An intimate bond between mother and child is frequently forged by breast feeding, but if the parent is forced to nurse against her will, relations with the child will be strained and may become permanently antagonistic. Since the nursing situation must be mutually satisfying, the decision to nurse or to bottle-feed the child should depend largely upon the mother's desires. Whichever method she selects, the physician should lend reassurance to dispel feelings of inadequancy or self-reproach, explains Milton I. Levine, M.D. Since the supply of breast milk is influenced greatly by emotional factors, encouragement will often produce increased secretion.

Breast milk is not essential for healthy growth and development of the infant and, except for the presence of an inconsequential amount of immune bodies, differs little from current artificial formulas.

New mothers may be divided into the following categories:

Anxious to nurse—Given proper emotional support and encouragement practically all these women are capable of nursing.

Apathetic, but will nurse if the baby will benefit—These mothers should be encouraged but soon need no further urging, since the experience of breast feeding yields much enjoyment and gratification.

Rather not nurse but will if nursing is considered best for the baby—Breast feeding should be calmly and intelligently discussed. The physician should endorse whatever method the mother chooses and, if an attempt to nurse does not prove happy and satisfying, artificial feeding should be immediately instituted.

Objects to nursing because of fears of obesity, breast abscesses, and being tied down—These women should not be encouraged to nurse since the experience would be accompanied by anxiety and frustration. The child derives much more benefit from bottle feeding by a relaxed mother than from breast feeding by one who is continually worried about her own well-being.

Dislikes and abhors the idea of nursing—This group should not be directed to nurse. The basis for such strong feelings about such a fundamental experience is deep-seated and cannot be removed by simple discussion or logic.

Unable to nurse because of economic factors such as need to work—These mothers often have feelings of guilt or inadequacy and should be

* A modern concept of breast feeding. J. Pediat. 38:472-475, 1951.

reassured that their infants will not suffer physically or emotionally from formula feeding.

The relatively few mothers with inverted or small nipples should receive adequate prenatal care of the breasts. However, if after a few days' trial at breast feeding the attempt proves unsuccessful, bottle feeding should be encouraged and prescribed.

Painful cracked nipples are usually corrected by local application and temporary use of nipple shields. With simple precautions, breast abscesses are extremely rare and can be treated successfully by antibiotics.

Feeding of Premature Infants

JANET B. HARDY, M.D., AND EUGENE O. GOLDSTEIN, M.D.*

If the amount of food is increased cautiously in accordance with the child's desires, premature infants thrive on a caloric intake much higher than that generally considered safe or necessary for proper growth.

Progress of three groups of premature infants was evaluated by Janet B. Hardy, M.D., and Eugene O. Goldstein, M.D., of Johns Hopkins University, Baltimore, who compared daily caloric intake, weight gain, and length of hospital stay from the second day of life until the children weighed 2,500 gm. or could leave the hospital.

The feedings for two groups consisted of a partially skimmed milk, Alacta, with 10% Dextri-Maltose added to give almost 1 calorie per cubic centimeter. The formula for the third group was modified slightly to allow 0.85 calories per cubic centimeter. The method of feeding, whether by gavage, medicine dropper, or nipple, was dictated by the child's condition and ability to suck or swallow. Supplementary vitamins A, C, and D were started on the fifth to seventh day.

The milk preparation was given to the infants in the first two groups in small, but gradually increasing amounts, allowing an increase of about 10 calories per kilogram of body weight daily until an intake of 120 to 130 calories per kilogram was reached at 10 to 14 days of age. The 120 to 130 calories daily were continued for the first group; the second group was fed by demand after the second week. The third group was fed by demand schedule after the second day of life.

The infants fed by demand after the second day of life gained better and left the hospital sooner than the others. The first group had the smallest weight gain and the longest hospitalization period.

* The feeding of premature infants. J. Pediat. 38:154-157, 1951.

Simplified Technic of Ankle Fusion

J. WARREN WHITE, M.D., AND WALTER A. HOYT, JR., M.D.*
Shriners' Hospital for Crippled Children, Honolulu — *Akron, Ohio*

PAINFUL and unstable ankles are often effectively treated by means of fusion.

The procedure may be indicated for flail joint when surfaces have been destroyed by infection or for arthritic joints, especially in cases secondary to trauma.

J. Warren White, M.D., and Walter A. Hoyt, Jr., M.D., present a simplified technic of ankle fusion which comprises exposure of the joint by removal of the medial malleolus and rotation of a square plug of bone removed from across the joint.

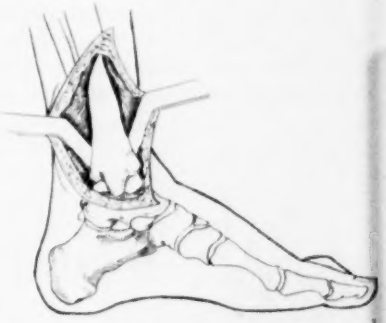

Fig. 1. Incision and exposure of tibia

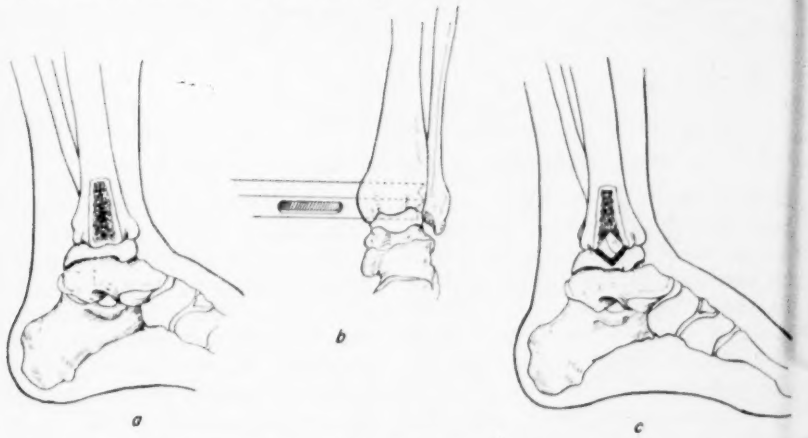

Fig. 2. Removal of medial malleolus and square plug of bone

A pneumatic tourniquet is used around the thigh. The skin is incised over the medial subcutaneous surface of the tibia, from 5 in. above the tip of the medial malleolus to 1 in. below. The tibia, including the entire

* A new and simplified technic of ankle fusion. South. M. J. 43:1007-1017, 1950.

malleolus, is exposed subperiosteally (Fig. 1).

The entire medial malleolus is removed with an osteotome to expose the medial horizontal surface of the ankle (Fig. 2*a*). The ankle joint is then placed in the desired position of final flexion.

A carefully centered, inch-sized square mortising chisel is driven across the entire width of the joint, removing a square plug of bone including the adjacent sides of the joint (Fig. 2*b*). The bone plug is removed from the chisel and the articular cartilage is scraped (Fig. 2*c*). The fibular articular surface is carefully curetted. Two pieces of bone plug are rotated ninety degrees and reinserted into the bed (Fig. 3*a*).

Sufficient extra bone logs, the width of the joint and removed from the distal tibia and medial malleolus, are then impacted between two pieces of plug to fill all dead space and stabilize the ankle (Fig. 3*b*). Impaction of these bone logs helps to separate the tibiotalar joint and compress the site of anticipated fusion. Any remaining portion of malleolus is removed and the wound closed in layers.

A cast is applied from toes to groin with knee flexed forty-five degrees and the foot in position of election. After four weeks, a short leg cast is applied, and in another month a walking tread is applied to the bottom of the short leg cast.

In most instances fusion is sufficient to permit weight bearing after three months.

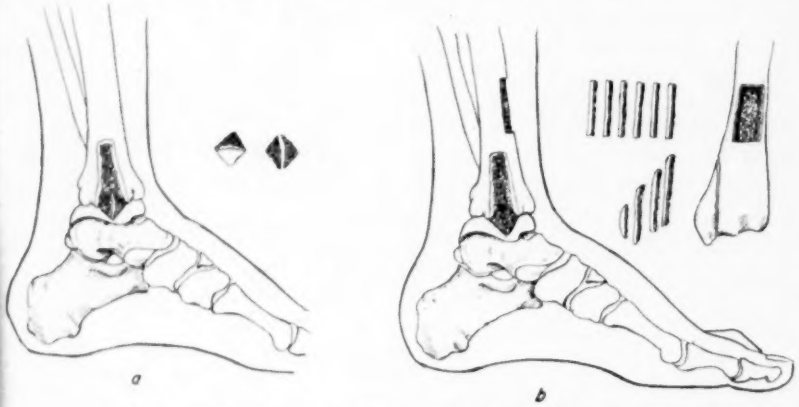

Fig. 3. Reinsertion of plug and addition of extra bone

This technic has many advantages: Removal of the medial malleolus permits visualization without disturbing vital structures crossing the medial aspect; whereas, by the anterior approach, tendons are retracted and the anterior blood supply to the astragalus is jeopardized. The operation is not difficult or time consuming. Use of the plug and logs permits some separation of joint surfaces, creating a desirable constant pressure at the fusion site. The ankle is stable.

Repair of Ruptured Biceps Tendons

ARTHUR A. MICHELE, M.D., AND FREDERICK J. KRUEGER, M.D.*

New York Medical College, New York City

U.S. Marine Hospital, Staten Island

Two locking procedures are valuable for procuring tenodesis of torn proximal and distal tendons of the biceps. The key-slot method is the most successful for fixation of long head tendons and the trap-door slot technic is preferred for frayed disinsertions, observe Arthur A. Michele, M.D., and Frederick J. Krueger, M.D.

Active motion is possible within a day or two of surgery and, since little pain is entailed, physical therapy can be started the day after operation. Edema is slight in comparison with other methods, and the cephalic vein is more readily spared in long head tendon repairs.

The tendon is exposed through an anterolateral incision. To prepare the tendon for tenodesis either the torn end is sewn back on itself at the side or center (Fig. 1*a*), a ball-shaped end is constructed with multiple cotton sutures (Fig. 1*b*), or the tendon end is tied in a knot (Fig. 1*c*).

Key-slot procedure—The adherent or retracted muscle belly is freed

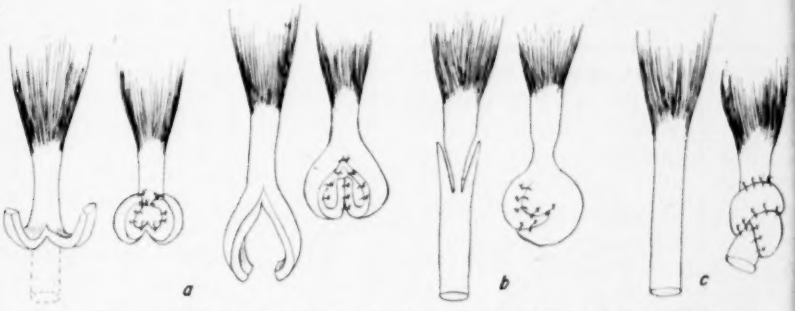

Fig. 1. Tendon is [*a*] sewed back, [*b*] formed into ball, or [c] tied in knot.

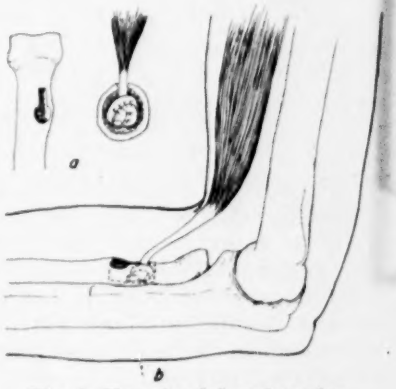

Fig. 2. Key slot [*a*] and tendon insertion therein [*b*]

* Tenodesis of biceps tendons. Surgery 29:555-559, 1951.

and stretched to normal length. The site for the key slot is marked on the anterior surface of the humerus. A hole is made with a 3/16 in. drill proximal to the mark, and a second hole of 1/8-in. diameter is drilled 1/8 in. distal to the first.

The key slot is completed by making a trench-like connection between the holes with a dental chisel or small osteotome (Fig. 2*a*). The tendon end is placed in the larger hole and pulled down into the slot until locking is firm and correct tension is exerted (Fig. 2*b*).

Trap-door method—The biceps tuberosity of the radius is exposed. A rectangular block around the tuberosity is cut with a Luck saw or similar small oscillating blade, leaving the proximal one-third intact and going about 1/8 in. distally on the shaft. The block is removed with an osteotome.

A notch is rongeured out in a semicircular fashion. The maneuver is repeated on the remaining tuberosity, completing the circle for reinsertion of the tendon (Fig. 3*a*). This hole is smaller than the tendon so that the end is solidly fixed by bone block, as a keystone wedge, holding the tendon firmly. Sutures or pull-out wires are not necessary. For reinsertion of the biceps tendon distally, a notch is rongeured out only in the removed bone block (Fig. 3*b*).

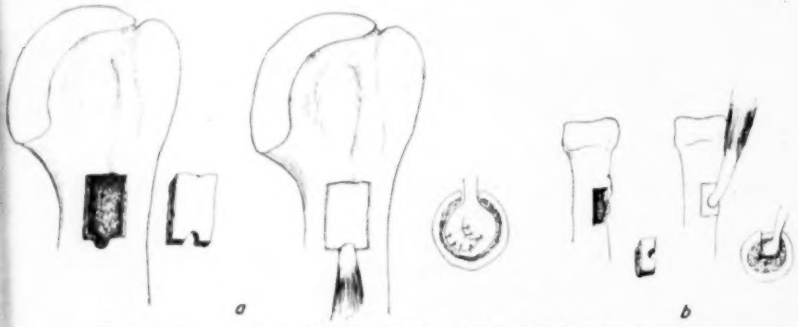

Fig. 3. Trap-door at [*a*] proximal and [*b*] distal end of bone

¶ ACNE VULGARIS responds better to fractional doses of roentgen rays than to vaccine and hormone treatment, in the experience of T. Pasieczny, M.D., and Peter Grant, L.R.C.P., of the Royal Infirmary, Glasgow. Of 19 patients who received 80 r weekly for eight to twelve weeks, 14 had good results and 5 fair. When the same number were given intramuscular doses of chorionic gonadotropin and increasing subcutaneous injections of mixed staphylococcic vaccine, 4 had good results, 6 fair, and 9 poor. Vaccine used was a suspension of dead microorganisms in normal saline solution.

J. Invest. Dermat. 16:71-74, 1951.

Principles in Dermatitis Therapy

DONALD M. PILLSBURY, M.D.*
University of Pennsylvania, Philadelphia

CURRENT methods of treatment of dermatitis may do harm as well as good. Many of the complex chemicals used for treatment interfere with healing and cause violent allergic reactions.

Dermatitis is an eruption with varying degrees of erythema, some edema of the skin, frank vesiculation or oozing, and pruritus. In the healing or chronic phases, changes such as scaling, crusting, lichenification, and pigmentation may be evident.

The cause is usually multiple and all factors must be diligently sought and eliminated. Donald M. Pillsbury, M.D., lists the following items as important in the production or perpetuation of dermatitis:

• Chemical irritation. Frequently local therapeutic agents worsen an already irritated tissue.

• Epidermal sensitization from application of chemicals in treatment. This is the single most important source of present-day dermatologic disability and is responsible for some of the complications of treatment with the sulfonamides, penicillin, and streptomycin. External use of these materials cannot be justified. Antihistaminic and various "caine" compounds are also common sensitizers.

• Bacterial invasion of the diseased skin. Within a short period after onset of dermatitis, the bacterial flora change and pustules, cellulitis, lymphangitis, and lymphadenopathy may ensue. The recuperative powers of the skin should not be hampered by applying harmful substances. Intramuscular penicillin is the most effective therapy.

• General broadening of the allergic base. During severe exacerbations of dermatitis, patients with sensitivity to one contactant may have a temporary increase in the range of contact sensitivities.

• Psychosomatic factors. Emotional elements are important in almost every case of chronic dermatitis. The chief mechanisms involved are related to itching, vasomotor changes, and hyperhidrosis of the hands and feet incident to tension.

• Functional vasomotor changes and organic peripheral arterial and venous disease. In these cases, mycotic or bacterial infections or dermatitides are notoriously difficult to cure. Stasis dermatitis may be very disabling and is often complicated by a generalized id eruption.

• Mechanical blockage of the sweat ducts. A large number of minor superficial injuries to the skin may produce obstruction of the sudoriferous ducts. A localized anhidrosis from obstruction of the sweat glands

* Physiologic principles in the management of dermatitis. New England J. Med. 244:423-429, 1951.

may occur with atopic dermatitis, contact dermatitis, fungous infections, ichthyosis, seborrheic dermatitis, and many other skin changes.

• Ichthyosis. A dry skin usually cannot tolerate soap, drying shake lotions, defatting agents such as hot water or synthetic washing compounds, and lotions containing alcohol or sulfur. Soap substitutes, ointments, greases, and emulsion type of preparations should be used.

• Seborrheic or oily skin. Chronic dermatitis in a person with oily seborrheic skin is usually localized in the scalp, retroauricular regions, external auditory canal, folds of the nose, and presternal and interscapular areas. Intertriginous involvement and secondary bacterial infection may occur. Treatment consists of local applications of sulfur and meticulous cleansing.

• Physical allergy, particularly photosensitivity. Instances of sensitivity to the sun are far more common than is ordinarily recognized.

• Roentgen-ray treatment. X-rays should be used sparingly in dermatitis in view of the great potentialities for harm and the inability to demonstrate lasting improvement by such procedures. Occasionally, benefit is noted after two or three exposures of 50 to 100 r each. Prolonged roentgen therapy is to be condemned.

• Cortisone and ACTH treatment. Striking effects may be produced in various types of chronic dermatitis by cortisone and ACTH, but severe recurrences usually follow cessation of therapy.

Hospitalization of the patient with chronic dermatitis facilitates early recovery by allowing close observation, rigid control of environment and therapy, and early detection of intolerance to treatment. In the hospital, all local and internal medication should be temporarily discontinued, visiting may be restricted, the room kept as allergen-free as possible, and an initial trial elimination diet attempted.

Treatment and prevention of acute and chronic dermatitis include the following:

The detection of responsible contactants and ingestants mainly by careful history and observation. Testing should not be done during the acute phase.

Sensitization from previous local therapy should be suspected and any further primary chemical or physical irritants avoided, such as local application of sulfonamides, antihistamines, "caine" compounds, nitrofurans, and all antibiotics except bacitracin and, possibly, aureomycin.

Ointments should not be applied in most cases of oozing dermatitis.

The irritated skin should be protected by inert powders, as in shake lotion, or by bandaging.

Nonirritating compresses or soaks are applied such as 1:8,000 potassium permanganate, Burow's or normal saline solution, or warm or cold milk.

The infection may be controlled by gentle removal of pus and epithelial debris and the administration of parenteral antibiotics based on thorough bacteriologic sensitivity study.

Any new local medicament should be spot-tested twelve to twenty-four hours before widespread application.

Itching is corrected by rest of the

affected parts, by use of menthol and camphor, and by not wearing irritating clothes.

Cool environment and avoidance of all vigorous exercise are important. Sedation may be achieved with antihistamines or barbiturates. Occlusive dressings, preferably old sheeting, prevent scratching.

Specific antigens should not be injected during the acute phase.

When healing progresses, inflammation subsides, and crusting and scaling start, ointments such as petrolatum, 3% ichthammol in zinc oxide ointment, or hydrophilic ointment containing 0.1% menthol and 1% camphor are valuable.

Urinary Smears in Diagnosis of Cancer

J. HARTWELL HARRISON, M.D., THOMAS W. BOTSFORD, M.D., AND MARTHA R. TUCKER*

MALIGNANT tumor of the kidney or bladder may be detected in the curable stage by study of exfoliated cells in stained urinary sediment.

Routine smears are particularly useful in showing recurrence of vesical carcinoma after conservative removal. Samples are prepared every two to four weeks. Cystoscopic examination is done only once in two or three months and whenever regrowth is suspected.

A technic suitable for office, clinic, or ward is employed by J. Hartwell Harrison, M.D., Thomas W. Botsford, M.D., and Martha R. Tucker of Peter Bent Brigham Hospital and Harvard University, Boston.

About 30 cc. of urine, freshly voided or, in the case of a female, drawn by catheter, is centrifuged for five minutes and supernatant fluid drained. The sediment is covered at once with 5 cc. of 95% alcohol and sent to the laboratory.

Material is spread on glass slides covered with eggwhite and, after drying until barely moist, is fixed and stained by the usual method for vaginal specimens.

Malignant cells are identified by large, hyperchromatic nuclei and bizarre shapes, for instance, the elongated cells of bladder papilloma.

Vesical or renal carcinoma was shown by smears from 82 of 614 patients with urinary symptoms, current or past. All bladder tumors produced demonstrable cells, but renal neoplasm was not detected in 3 of 15 cases. False positive results were obtained in 15 of 532 nonmalignant conditions.

* The use of the smear of the urinary sediment in the diagnosis and management of neoplasm of the kidney and bladder. Surg., Gynec. & Obst. 92:129-139. 1951.

Use of Artificial Kidney

OSWALD S. LOWSLEY, M.D., AND THOMAS J. KIRWIN, M.D.*
New York Hospital, New York City *New York Medical College, New York City*

EXPERIENCE has proved that the employment of an artificial kidney during acute temporary renal insufficiency may permit survival until renal function recovers. The device is used only when some hope exists that the kidneys will regain adequate function within a fairly limited time.

Oswald S. Lowsley, M.D., and Thomas J. Kirwin, M.D., describe an apparatus that is compact, mechanically efficient, and satisfactory for treating the failing or collapsed kidney. The machine operates on a dialysis principle, uses cellophane sheets as permeable membranes, and is portable and sterilizable.

Best results in maintaining adequate blood flow are obtained with deep cannulation of the antecubital veins, using the largest bore of thin-walled polyethylene tubing that the vein will accommodate.

No preliminary medication other than a sedative dose of barbiturate is necessary. The patient suffers little discomfort, but the dialysis is alternated every four to six hours with a rest of similar length to relieve the patient of the need to keep the arms in one position. A comatose person may be dialyzed continuously.

A heparin tolerance test is made to determine individual variations in metabolism. Routinely an initial injection of 1 mg. of heparin per kilogram of body weight is made, and additional injections are given every half hour during dialysis. Amounts and frequency are increased if the test shows heparin resistance.

The patient's heparinized blood is removed from the venous system and moved by a mechanical pump through the dialyzer at a controlled rate of flow. The volume of blood which is contained in the dialyzer, in series, is only 300 cc. The electrolyte solution temperature is thermostatically controlled and may be used over and over again during the dialyzing period.

When electrolyte solutions which contain no calcium are used, calcium gluconate must be administered intravenously. Calcium can be used in the electrolyte solution provided the partial pressure of carbon dioxide is maintained in the solution to prevent precipitation of an insoluble salt. Excessive doses of intravenous calcium should not be administered to digitalized patients.

Electrolytes, such as sodium or potassium, may be removed or, if desired, added to the blood by increasing the concentration in the solution.

The artificial kidney effectively reduces urea nitrogen, nonprotein nitrogen, and creatinine concentration and is an efficient substitute for the kidney for short periods. Patients with extreme oliguria or anuria

* Artificial kidney: preliminary report. J. Urol. 65:163-176, 1951.

caused by calculi, chemical poisoning, incompatible blood transfusions, sulfonamide toxicity, pregnancy toxemia, severe burns, crush syndrome, surgical injury to the urinary tract, or anuria from obstruction or spasm are proper subjects for treatment. In some exacerbations of chronic renal disease, the apparatus is also valuable.

Air-Contrast Colon Examination

HENRY H. JONES, M.D., HENRY S. KAPLAN, M.D., AND FRANK WINDHOLZ, M.D.*

SMALL polypoid lesions of the colon are more easily visualized by air-contrast technic than by the usual opaque enema. A special colloidal barium preparation is used for the enema, followed by injection of air.

This procedure produces a well-distended colon with the mucosa outlined by a uniform, thin, radiopaque coating. Polypoid lesions appear as uniform soft tissue densities, usually smoothly rounded, projecting into the lumen of the bowel and outlined by a coating of opaque medium.

Diverticula, air bubbles, and retained feces often resemble polyps. By manipulation under fluoroscopic guidance, diverticula can usually be shown to project out from, rather than into, the lumen of the bowel. Air bubbles can be differentiated by uniform, very sharply demarcated margins. Because of the difficulty of differentiating feces from polyps, equivocal findings must be compared by at least two separate examinations.

Henry H. Jones, M.D., Henry S. Kaplan, M.D., and the late Frank Windholz, M.D., of Stanford University, San Francisco, performed the double-contrast procedure as a separate examination. The bowel is cleaned by the administration of 2 oz. of castor oil the afternoon before the examination. On the day of examination, cleansing saline enemas may be given until the returns are clear.

The bowel is filled as far as the middescending colon with the colloidal barium mixture. Under fluoroscopic guidance, air is introduced until the opaque material reaches the cecum. The patient is turned during the filling to assure complete coating of the bowel wall.

Spot films of the sigmoid and flexures are made, and conventional films are done in erect posteroanterior, right and left lateral decubitus, and posteroanterior Trendelenburg positions. If polyps are found, a confirming examination is made after about a week.

* Air-contrast colon examination with colloidal barium. Radiology 56:561-566, 1951.

Schedules for Penicillin Treatment of Syphilis

ARTHUR C. CURTIS, M.D., *Ann Arbor*
DELMAS K. KITCHEN, M.D., *New York City*
PAUL A. O'LEARY, M.D., *Rochester, Minn.*
HERBERT RATTNER, M.D., *Chicago*
CHARLES R. REIN, M.D., *New York City*
ARTHUR G. SCHOCH, M.D., *Dallas*
LOREN W. SHAFFER, M.D., *Detroit*
AND UDO J. WILE, M.D.*, *Ann Arbor*

Type of Syphilis	Dosage†
Early Primary Secondary	2,400,000 units at first treatment (may be divided equally in each buttock), followed by 4 injections at 4-day intervals of 600,000 units each
Latent Late Osseous Cutaneous Visceral Mucous membrane Cardiovascular (No decompensation)	6,000,000 units: 600,000 units daily for 10 days or 600,000 units twice weekly for 5 weeks
Neurosyphilis (All types)	6,000,000 to 12,000,000 units: 600,000 units daily or twice weekly
Pregnancy 1st or 2d trimester	4,800,000 units: 600,000 units twice weekly for 4 weeks or 1,200,000 once a week for 4 weeks
3d trimester	600,000 units daily for 8 days
If labor is imminent	2,400,000 units at one time. Repeat in 1 week if patient has not delivered
For relapse	900,000 units once a week for 4 weeks (3,600,000 units)
Congenital Early (Less than 2 years)	One of the following 3 schedules: 1] 10,000 units per pound of body weight daily for 10 days 2] 15,000 units per pound of body weight twice weekly for 4 weeks 3] 40,000 units per pound of body weight once a week for 4 weeks
Late (More than 2 years)	6,000,000 units: 600,000 units daily or twice weekly
Prophylaxis	1,200,000 units in one treatment

† If response is unfavorable, a second course similar to the first may be given following a six- to eight-week rest period.

* Penicillin treatment of syphilis. J.A.M.A. 145:1223-1226, 1951.

Medical Forum

Discussion of articles published in MODERN MEDICINE *is always welcome. Address all communications to The Editors of* MODERN MEDICINE, *84 South 10th St., Minneapolis 3, Minn.*

Transverse Presentation of the Fetus*

Comment invited from
Charles S. Stevenson, M.D.
Edward H. Dennen, M.D.
George F. Melody, M.D.

► TO THE EDITORS: The very interesting paper by Drs. E. C. Garber, Jr., and H. Hudnall Ware, Jr., on transverse presentation of the fetus bears out several important points in the prevention and treatment of this condition.

With regard to prevention, many leading obstetricians advise that external version of the transversely or obliquely presenting fetus should be performed, and repeated each week until term if the fetus persists in returning to transverse presentation. The object of this is to prevent the dangerous situation of labor with the fetus presenting transversely, the membranes ruptured, and one arm or a scapula presenting or prolapsed. If it appears, in such a case, that the uterus is infected, the obstetrician feels he must do an internal podalic version. The risk to the mother that this maneuver entails is many times that of cesarean section.

In September 1949, I reported on 52 transverse presentations; 34 of the patients were delivered by the vaginal route, while 18 had section. Internal podalic version was not done in any case, and all mothers survived; 14 patients had placenta previa, of which 10 had sections, 6 because of complete previa.

The high incidence of placenta previa in patients with transverse or oblique presentation makes it important to know whether such placental implantation is present before external version is attempted. At the Herman Kiefer Hospital, it is routin for soft-tissue roentgen placentographic films to be made of all women who have transverse or oblique presentation any time from the thirtieth week of pregnancy on. After the films have been studied, if there is no evidence of placenta previa, external cephalic version is performed. This is usually very easily done, since the placenta in these cases, as I have demonstrated, if not a previa, is nearly always implanted in the fundus.

The best time for the first attempt at external version in these cases, in my experience, is thirty-two to thirty-four weeks. After that time it may be very difficult, if not impossible to accomplish. Whether or not the first attempt is successful the patient should be back on the examining table every week from then until term. Each time external version is

*MODERN MEDICINE, May 1, 1951, p. 95.

attempted if the fetus still lies in transverse or oblique presentation.

Drs. Garber and Ware have made an important point in recommending section instead of internal podalic version, which an obstetrician may often feel is his duty, because of infection, a dead fetus, or for some other reason. Insofar as cases of transverse presentation are concerned, we reserve internal podalic version for instances in which there is full dilatation of the cervix, ruptured membranes, and a presenting arm or scapula.

CHARLES S. STEVENSON, M.D.
Detroit

► TO THE EDITORS: The rare but serious complication of pathologic axial torsion of the uterus is one cause of transverse presentation and is best managed by cesarean section. Early recognition of this condition, though rare, can be made by palpation of a round ligament near the midline of the abdomen.

EDWARD H. DENNEN, M.D.
New York City

► TO THE EDITORS: The best procedure in the management of transverse presentation depends upon the particular circumstances. The choice of procedures, however, includes external version, internal podalic version and breech extraction, cesarean section, and decapitation.

External version early in labor in a multipara with lax abdominal wall and no disproportion is occasionally successful and is surely worthy of a trial. Transverse lie in a primipara at or near term is a priori evidence of cephalopelvic disproportion, uterine malformation (duplication anomaly), or myomas.

Internal podalic version and breech extraction still has a valuable role in the management of this complication. It is the procedure of choice for a multipara with a normal pelvis, provided the uterus is not tonically contracted, the attendant is experienced in the technic of version and extraction, and a competent anesthetist is available who can safely etherize the patient so that the uterus becomes totally flaccid. Otherwise, the attendant had better do a cesarean section.

If the labor has been permitted to go on until the uterus is in a state of tetanic contraction and the fetus is dead or moribund, decapitation is, I believe, the correct procedure.

GEORGE F. MELODY, M.D.
San Francisco

Prevention of Deafness*

Comment invited from
G. Alexander Fee, M.D.

► TO THE EDITORS: Dr. Edmund Prince Fowler has, as usual, presented a paper which indicates a very thorough knowledge of the latest research in the prevention of deafness. He mentions all the etiologic factors concerned and suggests what methods can be used for prevention in each case within the limits of our present knowledge.

His discussion of heredity and the limited effect of eugenics in prevention is sound. Not enough, however, is being done in this direction. For instance, one family has had children

*MODERN MEDICINE, Oct. 1, 1950, p. 88.

at the Belleville School for the Deaf for five consecutive generations. When it is considered that each child with familial deafness is not only deaf himself but is potentially the forefather of a large clan of deafened individuals, it seems both stupid and immoral not to take steps in clear-cut cases to prevent the spreading of this crippling disease.

Because persons who are born deaf very seldom make satisfactory contact with hearing people, they tend to congregate and intermarry. Legislation should be passed to withhold marriage licenses from these individuals until an otologic examination and check on the family history have been done and, when the evidence indicates a definite hereditary tendency, the marriage should be prevented unless one of the parties agrees to sterilization. Such procedure would not eliminate all hereditary deafness but should have a very beneficial effect.

One type of deafness not mentioned by the author is that which sometimes occurs when the parents have an incompatible Rh factor. I have recently seen 3 cases of this type. The loss is usually in the neighborhood of 50% and is often not recognized until the child starts to school, the child often being considered inattentive or backward.

In his discussion of the prevention of deafness, I believe that the author does not sufficiently stress the importance of measures to prevent chronicity in ear infections. While the number of handicapped persons in this group is small, such cases are nearly 100% preventable.

The fact that we see a large number of chronic ear infections in offices and clinics would indicate that too often the handling is inadequate in the acute stage. It is important to remember that the antibiotics will not completely clear up an infection unless drainage is adequate. When pus is under pressure in the middle ear in the presence of a blocked eustachian tube, a properly done paracentesis will very frequently prevent chronicity with resultant hearing loss.

I also feel that if, when teaching men to do T & A's, as much stress were put on the A as on the T, we would be seeing fewer cases of chronic ears and catarrhal deafness. It is an operation that is done badly far too often.

G. ALEXANDER FEE, M.D.
Toronto, Ont.

Operations for Cancer of the Bladder*

Comment invited from
Victor F. Marshall, M.D.
Burle B. Madison, M.D.
Hugh J. Jewett, M.D.
J. Sydney Ritter, M.D.

► TO THE EDITORS: Dr. R. H. Flocks has been one of the leaders in improving methods of treatment of carcinoma of the bladder and the conclusions in his recent article are based on sound factual data.

The fact that the best treatment for cancer of the urinary bladder cannot be described in a few words is fair evidence that the over-all results are not good. The lack of an adequate classification having prognostic importance makes comparison

*MODERN MEDICINE, May 1, 1951, p. 74.

between different methods extremely difficult. Comparison of results reported by different authors is often nearly impossible, not only because of different selections and different technics but also because of this lack of a standard classification. Jewett has made an excellent start toward such a classification, but to fit cases accurately into Jewett's classification requires that the bladder and at least some of the lymph nodes be removed.

Simple or radical cystectomy with permanent urinary diversion is still a formidable procedure, carrying in our hands a postoperative mortality in the hospital of between 10 and 15%. Furthermore, the immediate mortality figures do not indicate the over-all morbidity and late complications, which are matters only beginning to be accurately described.

In theory, the urologist could cure a high percentage of the low-grade and small carcinomas of the bladder by cystectomy, but, in spite of significant progress, the price is still too high considering that less radical methods produce a fairly good salvage in such cases. Superficial excision and thorough fulguration of the most benign tumors—papilloma histologically benign and without invasion—have long been highly successful, particularly if the patient is followed very carefully with periodic cystoscopic examinations.

A few tumors are well localized and located 3 or 4 cm. from the ureteral orifice. These may be successfully treated by segmental resection of the bladder, but when the limits of application of this technic are widened, good results decrease proportionately. Most tumors of the bladder occur in the lower third, and for a segmental resection to be really adequate here is unusual.

Radiation methods produce so much tissue reaction that the patient is often more uncomfortable after treatment than before. However, radiation methods do cure a few carcinomas of the bladder.

The present enthusiasm for radical cystectomy and pelvic exenteration should be looked upon as an investigation, but from it will probably come a delineation of the class of patient for whom this treatment is applicable. The radical program will at least increase our knowledge of the extent and modes of spread of these tumors, and it does appear to be the only hope now for patients with metastases to the lymph nodes of the pelvis.

VICTOR F. MARSHALL, M.D.
New York City

► TO THE EDITORS: No one treatment is best for carcinoma of the bladder. Many factors must be considered, including the age of the patient and his general condition. Although all bladder tumors of epithelial origin are considered malignant, the grade of malignancy varies greatly.

The type of treatment is determined by the size, site, and invasiveness of the tumor, the number of tumors and grade of malignancy, the presence of metastases, and the evaluation of the upper urinary tract. A thorough physical examination and complete urologic study with biopsy, roentgen studies, and examination under anesthesia, are required.

When the above factors are determined, the treatment best suited to

the particular type of tumor is carried out. Thorough study may show that only palliative measures, such as urinary diversion, are possible. Tumors are amenable to electrocoagulation and transurethral resection when they are not the invasive type, even though of considerable size. When the tumor cells invade into the muscularis and serosa, partial and total cystectomy may be required. Roentgen therapy is of little value.

BURLE B. MADISON, M.D.
Springfield, Ill.

► TO THE EDITORS: At the present time, sufficient information has not accumulated to enable us to state positively which method of treatment for cancer of the bladder is superior to all others. The principal reason for the present conflict of opinion regarding proper treatment is the incompleteness and therefore lack of stability of the classifications now in use.

Basically, there are two major categories into which these tumors should be segregated: [1] tumors confined to the bladder wall, and [2] tumors which have spread beyond the bladder wall.

Other considerations, such as grade of malignancy, multiplicity, localization, circumference, and tendency to recurrence, are secondary. When extravesical spread has occurred, failure of the treatment to effect a cure does not necessarily mean that such treatment lacks efficacy, but when extravesical spread has not occurred, failure to obtain a cure is attributable to the particular treatment employed.

Tumors which have extended more than halfway through the vesical muscularis usually have metastasized, and those which have infiltrated less than halfway usually have not. It is obvious that conservative procedures cannot be expected to control tumors with metastases, and it is possible that radical operation also may fail, except in rare instances, especially since the metastases are so often hematogenous. Tumors superficially infiltrating, which usually have not metastasized, should be controlled by any procedure capable of completely destroying such a localized growth.

The clinical segregation of the superficially infiltrating from the deeply infiltrating tumors is best accomplished by rectoabdominal palpation of the bladder wall under general anesthesia, combined with a fairly deep transurethral biopsy. Any induration or mass palpable after electroexcision with adequate excavation beneath the tumor indicates deep infiltration if the biopsy shows tumor cells throughout the muscle. The five-year survival rate in this group is very low, even after total cystectomy.

When no induration or mass can be felt, and the biopsy shows only partial infiltration of the muscularis, the tumor usually is superficially infiltrating and localized. It therefore remains for the future to determine which method of treatment—radical or conservative—is the most efficacious in the control of these superficially infiltrating and usually localized tumors.

HUGH J. JEWETT, M.D.
Baltimore

► TO THE EDITORS: Apparently, a difference of opinion exists as to the most efficient treatment of cancer of the urinary bladder. The cancer must be classified carefully as to relative malignancy before the election of a curative procedure. The type of tumor must be evaluated so as to adapt the best surgical modality to the particular growth.

According to the clinical classification, the small pedicle growth should be considered clinically benign (see illustration). As the base of the growth becomes larger and the tumor more sessile, the degree of malignancy is greater. Often, disregarding the pathologist's interpretation, we are guided by what we see.

Benign polyp [a]; stalk larger with increasing malignancy [b]; subsessile type, highly malignant [c]; sessile type, highest degree of malignancy [d]

The small, benign type of growth will respond to simple endoscopic excision and electrocoagulation of the base. For the malignant infiltrating growth involving the trigone, radical cystectomy with ureterointestinal or ureterocutaneous implantation is advisable. For those growths in resectable areas of the bladder, partial cystectomy, with or without ureteral reimplantation into the bladder, is employed and advocated with expected good results. In other words, the type of surgical treatment to be undertaken rests primarily on the clinical judgment of the urologist.

For relatively benign growths, the McCarthy electrotome for excision and electrocoagulation of the base gives the most gratifying results. Especially, since the introduction of the retrograde electrotome of McCarthy, are we able to treat those growths situated in the blind area just internal to the urethral sphincter.

In the female, manual divulsion of the urethra with visualized removal of a large tumor is a feasible procedure. Electrocoagulation of the base is easily accomplished cystoscopically. For sessile and subsessile growths, partial cystectomy with or without reimplantation of the ureter as indicated has given most satisfactory results. McCarthy's complete mobilization of the bladder, walling off the bladder with lap pads and massive electrocoagulation, has given some gratifying results in cases thought to be inoperable.

I must emphasize that total cystectomy should be reserved as a last resort, for the results of this procedure, whether the ureters are implanted into the bowel or skin, are universally unhappy.

Radium bomb as suggested by Milton Friedman is now being used to prevent recurrences, but it is too early for comment on this method.

J. SYDNEY RITTER, M.D.
New York City

Diagnostix

Here are diagnostic challenges presented as they confront the consultant from the first clue to the pathologic report. Diagnosis from the Clue requires unusual acumen and luck; from Part II, perspicacity; from Part III, discernment.

Case MM-194

THE CLUE

ATTENDING M.D: I was on call for the medical service last night and had a very interesting experience. One of the ward attendants, a man of 43, was preparing to go off duty when he was suddenly seized by a severe pain in the right upper chest. I saw him almost immediately. He was apprehensive and holding his right chest. A hurried physical examination of his heart and lungs revealed nothing abnormal except a slight tachycardia, regular at a rate of 120. I had him lie down and asked the nurse to get the electrocardiograph.

VISITING M.D: Did the pain persist?

ATTENDING M.D: Yes, and the patient became dyspneic. I checked his blood pressure again and it had fallen from 130/80 to 95/70. His pulse became weak and he began coughing.

PART II

VISITING M.D: Did you know his past medical history? Had he had hypertension or angina?

ATTENDING M.D: I treated him for erysipelas six months ago. My examination at that time was completely normal and he had had no cardiac or respiratory symptoms.

VISITING M.D: What happened next?

ATTENDING M.D: The patient became more and more dyspneic. I examined his chest again and this time could not hear breath sounds or feel fremitus over the right upper lobe. There was no dullness by percussion, however. By that time the nurse had arrived with the electrocardiograph but the electrocardiogram which we made was normal except for sinus tachycardia. By then the patient was receiving oxygen and I called the x-ray technician for a portable chest film.

VISITING M.D: Did the patient become cyanotic? Did his pain continue?

ATTENDING M.D: The chest pain became less severe but, despite the oxygen, his lips and nail beds became cyanotic.

VISITING M.D: Did the cough become productive? Was there hemoptysis?

ATTENDING M.D: No, the patient brought up no sputum or blood but he did cough spasmodically.

PART III

VISITING M.D: Did the physical findings in the chest change?

ATTENDING M.D: Yes, the trachea shifted to the left. The intercostal spaces on the right became full and bulging, and the point of maximal impulse of the heart moved laterally into the anterior axillary line. The percussion note over the right lung was now hyperresonant. Auscultation near the left border of the sternum revealed a crunching sound, synchronous with the heart beat.

VISITING M.D: I hope you didn't wait for the chest film before starting therapy.

ATTENDING M.D: No, the patient's respiratory distress was too acute. I was quite confident of my diagnosis and inserted a blunt 18-gauge needle with three-way stop valve attached into the pleural space. The needle released air under a pressure of plus 10 to plus 20 cm. of water. I attached a long rubber tube to the needle. The tube was led over the edge of the bed into a bottle of water on the floor and fixed so that its end was 2 cm. under the surface of the water.

VISITING M.D: Did the patient improve?

ATTENDING M.D: Yes, quite dramatically. A good bit of air bubbled out through the water trap and the breathing became almost normal.

PART IV

VISITING M.D: Tension pneumothorax is truly a medical emergency. You handled the situation very nicely.

ATTENDING M.D: Fortunately I had recently read about spontaneous pneumothorax. Not all cases require removal of air, do they?

VISITING M.D: That's right. If the air pocket occupies less than 30% of the lung's volume, bed rest alone will suffice. With larger pneumothorax or mediastinal herniation, air should be removed by needle until the intrathoracic pressure is minus 10 to minus 20 cm. of water on moderate inspiration. However, when the tear in the visceral pleura acts like a valve so that with each breath more air becomes trapped in the pleural space, acute respiratory distress will develop. This so-called tension pneumothorax is best handled as you have done. The water trap apparatus serves to maintain atmospheric pressure in the chest.

ATTENDING M.D: How long must the needle be left in place?

VISITING M.D: You can determine when the tear in the visceral pleura has closed by clamping the tube to the water trap. If the pneumothorax pocket does not enlarge, the needle may be removed but the patient must be carefully watched, and repeated films of the chest made. The patient should rest in bed for several days at least and limit his activity for a short period thereafter.

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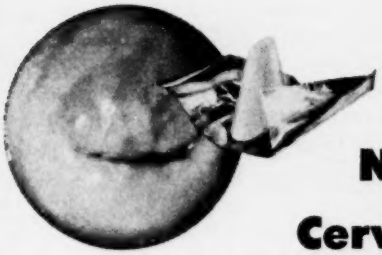

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Basic Science Briefs

Experimental Surgery

Mechanism of Hypertension

Arterial hypertension accompanying high cerebrospinal fluid pressure results partly from pressure on the brain and not entirely from cerebral anemia. Severe ischemia in dogs caused by ligation of blood vessels to the brain induced hypertension in only 24% of surviving animals and lasted only seven to fifteen days. When circulation was impeded and a tantalum wire was embedded in the floor of the fourth ventricle and heated by short-wave diathermy, 64% of the dogs had hypertension lasting two to ten months. When cerebral ischemia was combined only with a wire implant or diathermy to the head, however, Drs. Robert D. Taylor and Irvine H. Page of the Cleveland Clinic, Cleveland, noted less frequent rises of shorter duration. In animals with isolated perfused brains, systemic blood pressure was elevated by clamping of the perfusing artery and still more by increase of cerebrospinal fluid pressure from 150 to 200 mm. of mercury.

Circulation 3:551-557, 1951.

"I wonder who my first patient will be?"

Cardiology

Atherosclerosis Reduced

Intravenous injection of surface-active agents decreases experimental atherosclerosis, apparently through effects on blood lipids. Cholesterol-fed rabbits usually have hyperlipemia with high blood cholesterol, a slight rise in blood phospholipids, and in a few weeks conspicuous atherosclerosis of the aorta. When Tween 80 and Triton A20 were administered by Dr. Aaron Kellner and associates of the New York Hospital–Cornell Medical Center, New York City, the proportion of phospholipids was much increased and atherosclerosis greatly lessened. However, Tween 80 did not affect atherosclerosis already formed. Also the hinderance to atherosclerosis is not absolute. Repeated injection of Triton A20 produced atherosclerosis in some animals fed cholesterol-free diets.

J. Exper. Med. 93:385-398, 1951.

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Short Reports

Pediatrics

Psychologic Approach

No patient likes to wear a cast. The little girl in the picture had been told that she would be out of hers by Easter. When the doctors removed the cast, however, they found that another cast would have to be applied. Then one of the technicians at Permanente Hospital, Oakland, had an inspiration. He put ears onto the head covering. The picture is evidence that the Easter Bunny cast made up for the disappointment of having to wear a new cast.

Dermatology

False Positive L.E. Test

In diagnosis of acute disseminated lupus erythematosus, plasma specimens should be kept from contamination with fungi. Dr. John R. Haserick of the Cleveland Clinic, Cleveland, finds that the characteristic phenomenon of rosettes of clumped leukocytes and phagocytic cells of L. E. type appears when *Aspergillus* is added to prepared bone marrow samples from healthy persons.

J. Invest. Dermat. 16:211-215, 1951.

Experimental Surgery

Small Arterial Grafts

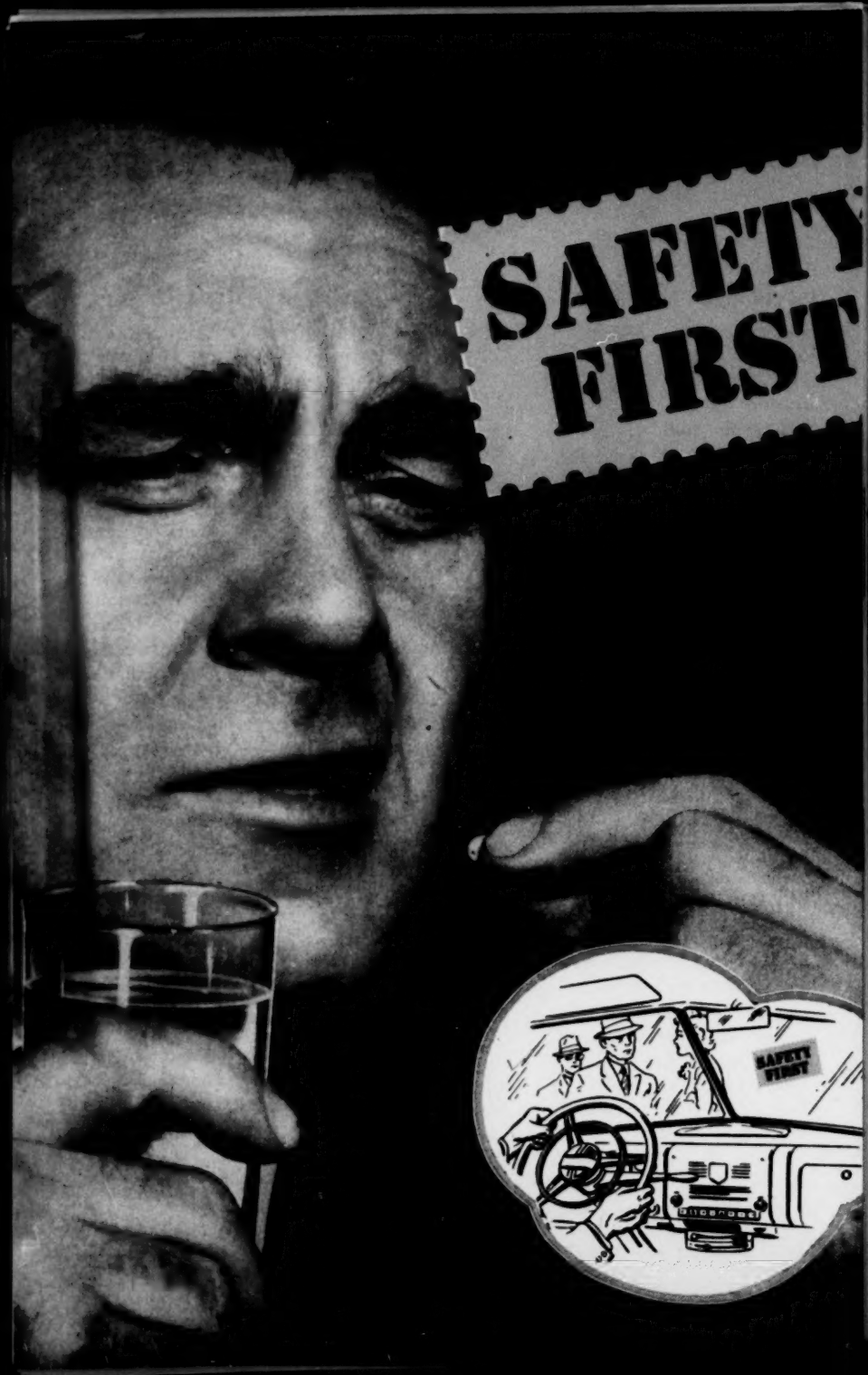
After injury or radical operations, small essential arteries can be repaired by autogenous grafts or vessels from other sources. Fresh or preserved segments of artery, 1.8 to 3.5 cm. long with outer diameter of 3 to 4.5 mm., were successfully transplanted in femoral arteries of dogs by Dr. Harry H. Miller and associates of Tufts College and the New England Center Hospital, Boston. Ends were joined by a continuous lock suture with No. 000000 silk swedged on atraumatic needles. Penicillin was given, but anticoagulants were unnecessary. After periods of sixteen days to over a year, 34 of 39 implants were functioning, including all 5 autografts, 9 of 10 fresh homografts, and 20 of 24 preserved sections. Autogenous grafts seemed permanently satisfactory and the others useful much longer than needed for collateral circulation to develop.

Surg., Gynec. & Obst. 92:581-588, 1951.

Statistics

Blindness at Birth Increases

In recent years the number of children born blind has increased 17%, reports the American Foundation for the Blind. The increase is attributed to the progress made by medical science in saving the lives of premature babies.


SAFETY
FIRST
SAFETY
FIRST

in daytime antihistamine therapy

The necessity of maintaining mental alertness under daytime antihistaminic medication should be a controlling factor in the choice of an antihistaminic agent. Sedation (the most common side effect of many antihistaminics[1,3]) can disturb concentration[1] and judgment,[4] cause failure in the operation of automobiles and other machines,[4] and lead to serious accidents.[1]

• Neohetramine offers a high degree of freedom from sedative effect.[1,3] Indeed, in a series of carefully controlled experiments on normal human subjects, Neohetramine in 50 mg. dosage "did not interfere with the efficiency of psychological test performance" in any of seven tests employed.[2] • For on-the-job alertness in antihistamine therapy, because of minimal sedation, prescribe Neohetramine. It may often be employed in cases intolerant to other antihistaminics. Yet its usefulness is clinically equivalent to that of other preparations. Professional samples on request.

Dosage: Average dosage is 50 mg. to 100 mg. two to four times daily depending on response, severity of symptoms, and number of allergens present.

Available: In 25 mg., 50 mg. and 100 mg. Tablets in bottles of 100 and 1000; as Syrup Neohetramine, providing 6.25 mg. per cc., in pint and gallon bottles; and as Cream Neohetramine 2% in 1 oz. tubes.

References: 1. Feinberg, S. M.: Ann. N. Y. Acad. Sci. 50:1186 (April) 1950. 2. Landis, C. and Zubin, J.: J. Psychology 31:181 (April) 1951. 3. Schwartz, E.: Ann. Allergy 7:770 (Nov.-Dec.) 1949. 4. Sherman, W. B.: Bull. N. Y. Acad. M. 27:309 (May) 1951.

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HYDROCHLORIDE

Brand of Thonzylamine Hydrochloride

for effectiveness... for greater tolerance... in antihistamine therapy

N, N-dimethyl-N'-p-methoxybenzyl-N' (2-Pyrimidyl) ethylenediamine monohydrochloride, an original and exclusive development of Nepera Chemical Co., Inc., an organization devoted to research and manufacture of fine pharmaceutical products.

Treatment

Diabetic Gangrene

When diabetic ulcers resist ordinary measures, mechanical debridement by bacterial enzymes may relieve pain and encourage healing. Drs. Leon V. McVay, Jr., and Douglas H. Sprunt of the University of Tennessee, Memphis, obtained good to excellent results in all of 5 cases with streptokinase and streptodornase. For local application, amounts such as 100,000 units of the first agent and 40,000 units of the second are dissolved in a few cubic centimeters of distilled water or saline solution to which aureomycin powder is added. The liquid soon forms a semipaste which serves as a dressing. Wet soaks are given every two or three days. Daily treatment is safely carried out at home.

Arch. Int. Med. 87:551-559, 1951.

Phthisis

Tuberculosis and Diabetes

The incidence of tuberculosis is increased by presence of diabetes. Among 3,106 diabetics in Philadelphia, chiefly elderly white women, tuberculosis was twice as common as in a corresponding nondiabetic group. A photofluorographic survey conducted by Dr. David A. Cooper and associates also showed that the pulmonary infection was related to severity of diabetes. Other factors were duration of diabetes among those under 40 years old and of substandard weight, regardless of age or severity. The proportion of infection read as active was 3 times as high in diabetic as in nondiabetic tuberculous subjects.

Irradiation

Ultraviolet Rays and Tumor

Exposure to ultraviolet radiation of low intensity hastens development of spontaneous mammary tumors in mice, reports Dr. Janet Howell Clark of the University of Rochester, N.Y. Three groups of C_3H mice were studied. One group was kept entirely in the dark, a second lived in darkness but had ultraviolet treatments three times a week, and the third had controlled artificial daylight for twelve hours in twenty-four. At the age of 360 days, tumors had appeared in 46% of the animals with half-time lighting, in 57% of those kept in darkness, and in 74% of the irradiated mice.

Federation Proc. 10:26-27, 1951.

Pediatrics

Antibiotic Combination for Infantile Diarrhea

Important as antibiotic therapy may be in treatment of infantile diarrhea, early administration of fluids and electrolytes is paramount. With the same general supportive and dietary therapy, 53 infants received different antibiotics and antibiotic combinations. The most effective, according to Drs. Elmer R. Kadison and Maxwell P. Borovsky of the Cook County Hospital, Chicago, is Neobacin, a tablet containing 10,000 units of neomycin and 2,000 units of bacitracin. Treatment consists of 1 tablet every six hours for two weeks. Resistant cases may require a second course of 2 tablets every six hours. Duration of diarrhea was shortened and in no case did diarrhea recur.

J. Pediat. 38:576-589, 1951.

Donnatal

Publications

Psychopathology Journal

Advancement of clinical and research psychiatry is the aim of a new medical publication, *The Journal of Clinical and Experimental Psychopathology*. Dr. Arthur M. Sackler, New York City, is the editor, assisted by Dr. Felix Marti-Ibañez, international editor, and by national and international editorial boards comprised of outstanding practitioners of psychiatry.

Experimental Surgery

Artificial Conical Valve

After resections of the duodenum and pancreas with destruction of Oddi's sphincter, regurgitation of intestinal contents into the biliary tree may be prevented by an intussusception forming a conical valve. The structure remained viable in dogs and prevented leakage in an antiperistaltic jejunal limb, created by a Roux-Y type of anastomosis, even when the limb was less than 6 in. long. Alimentation and flow of bile and pancreatic juices proceeded normally. In the procedure followed by Dr. Donato E. Basso of St. Louis University, St. Louis, the flanged end of a glass rod is inserted into a jejunal stoma. About 3 in. from the stoma a purse-string suture of plain catgut is placed around the jejunum and tied below the flange. The rod is pushed distally as the jejunum below the flange is grasped with a wet sponge and pushed proximally, until the intussusception is 2 in. long. Silk sutures are applied and the rod is withdrawn.

Ann. Surg. 133:477-485, 1951.

Public Health

Blood Processing Apparatus

A mechanical system of preparing blood carries out all steps in closed operations, from collection to storage in plastic containers. The apparatus was demonstrated recently by Dr. Edwin J. Cohn and associates of Harvard University, Boston. Blood flows from the donor directly into the machine, where red and white cells, plasma, and various components are separated, sterilized, and preserved. Cells are concentrated in a more natural state than possible by former methods. The automatic process is designed for large blood collecting centers and emergency work.

Statistics

Tuberculosis Deaths Decline

Random samples of death certificates from all the states and the District of Columbia indicate that the nation's death rate from tuberculosis is still decreasing. The 1949 rate was 26.2 per 100,000 of population. During the first eleven months of 1950 the rate dropped to 22.6 per 100,000. reports Dr. W. Palmer Dearing, Acting Surgeon General of the U.S. Public Health Service.

► The death rate from tuberculosis among Negroes is 3 times as great as among whites, Dr. Joseph Aronson of the Henry Phipps Institute, Philadelphia, told physicians attending the 1951 convention of the National Tuberculosis Association at Cincinnati. Resistance to the disease in infancy is the same in the two races, according to his studies.

Never available before

- such control of staining
- such welcome convenience[1]

in **gentian violet** therapy

for **monilial vaginitis**

gentia·jel

single-dose disposable applicators

a 2 year study[1] at Margaret Hague Maternity Hospital clearly proved **gentia-jel** a most effective, convenient, safe form of gentian violet. Single-dose disposable applicators deposit **gentia-jel** jelly **inside** vaginal tract with a minimum of staining, soilage, fuss.

Safe, non-irritating, for home use even through late pregnancy.

93% combined cure and improvement...used during the last trimester of pregnancy **gentia-jel** cured 149 (78%) of 191 women with vaginal mycosis...most within 2 weeks. Combined cures and improvement totalled 93% of all cases. Itching, burning and other symptoms were largely controlled within 48 to 72 hours.

Formula: 0.2% gentian violet, 3% lactic acid, 1% acetic acid in a water-soluble polyethylene base.

samples and literature on request

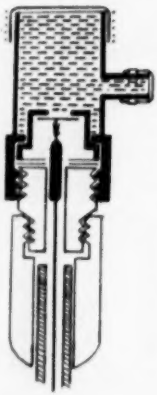
Westwood Pharmaceuticals
DIVISION OF FOSTER-MILBURN CO.
468 Dewitt Street, Buffalo 13, N.Y.

1. Waters, E. G., and Wager, H. P.: Amer. J. Obstet. & Gyn. 60:885, 1950.

Diagnosis

Ultrasonic Detection of Tissue Changes

Tissues of abnormal texture are revealed by the ultrasonoscope, an instrument that sends and receives high frequency sound waves. Like echoes from a mountain, pulsations are reflected from the surfaces of altered density to the source, where both traveling time and strength are recorded. Drs. J. J. Wild of the University of Minnesota and Donald Neal of Wold-Chamberlain Naval Air Station, Minneapolis, employ a 15-megacycle quartz crystal plate mounted in a chamber filled with water and closed with a rubber membrane (see illustration).



The piezoelectric crystal not only converts electricity into sound but records the reflection. Both the original pulses and the response of the crystal are shown by a cathode-ray oscilloscope and photographed for a permanent record. The ultrasonograph locates hidden tumor. For example, cancer metastases were found in a fresh human brain after death. Passage of signals through ependymoblastoma required twice as long as through healthy cerebral tissue. Much stronger return signals were recorded from within the tumor. Carcinoma and fibroadenoma of the breast were diagnosed without harming the patients.

Lancet 260:655-657, 1951.

Urology

Spermatogenic Rebound

Testosterone propionate first depresses, then increases the sperm count. In 5 men with moderate sterility of unknown cause, pretreatment values were eventually more than doubled or tripled and in 1 instance rose from 31,000,000 to 286,000,000. Dr. Norris J. Heckel and associates of Presbyterian and Ravenswood hospitals, Chicago, injected 50 mg. intramuscularly three times weekly for ten to eighteen weeks until complete or partial azoospermia resulted. The rebound was observed within twenty-nine weeks after discontinuance of the course.

J. Clin. Endocrinol. 11:235-245, 1951.

Cardiology

Nitroglycerin Effects

When coronary occlusion is a possible cause of angina, nitroglycerin should be taken with great caution. The drug apparently relieves pain of simple temporary myocardial ischemia by increasing the coronary flow relatively more than work of the heart. Cardiovascular effects of 0.0006-gm. doses on 10 healthy young adults were recorded by Dr. René Wégria and associates of Columbia University and Presbyterian Hospital, New York City. Cardiac output per minute, systolic output, and heart rate increased, but blood pressure did not change. Cardiac work per beat and per minute was obviously increased. If infarction developed and nitroglycerin failed to relieve pain, several tablets taken in succession might cause shock.

Am. J. Med. 50:414-418, 1951.

Now—A Simplified Plan
for Arrest of Functional Uterine Bleeding

Wyeth

1ST DAY (all cases)

1 TUBEX*

	IF BLEEDING STOPS WITHIN 12 HOURS	IF BLEEDING PERSISTS MORE THAN 12 HOURS
2ND DAY	 1 TUBEX	 1 TUBEX
3RD DAY	 1 TUBEX	 1 TUBEX
4TH DAY		 1 TUBEX
5TH DAY		 1 TUBEX

Withdrawal bleeding occurs 1 to 6 days after cessation of therapy, and will last 4 or 5 days. Plan cyclic hormone therapy to institute normal bleeding cycle.

*If bleeding is severe, two Tubex are given the first day.

TRISTERONE offers a system of treatment which combines

- A clear-cut dosage schedule
- A combination of hormones in adequate dosage
- The convenience and simplicity of TUBEX® method of injection
- Clinical confirmation of effectiveness.

"Satisfactory arrest of uterine bleeding occurred within 24 hours after beginning of therapy in 48 (84.2%) patients, and within 72 hours in all (100%) patients with functional uterine bleeding"[1]

TRISTERONE is an aqueous suspension of

Progesterone	25 mg.
Testosterone	25 mg.
Crystalline Estrone	6 mg.

in each TUBEX. Each package contains 3 TUBEX and 3 sterile needles.

Literature will be sent to physicians on request

TRISTERONE*

(Crystalline Progesterone, Testosterone, and Estrone Wyeth)

1. Greenblatt, R. B. and Barfield, W. E.: "The Therapy of Functional Uterine Bleeding." Read before the Rowan-Davie Chapter Acad. Gen. Practice, Salisbury, N.C., April 24, 1951.

*Trade-mark

Wyeth Incorporated • Philadelphia 2, Pa.

Pediatrics

ACTH-induced Diuresis

Edema of the nephrotic syndrome may be reduced by ACTH. Dr. Conrad M. Riley of Columbia University, New York City, noted apparently permanent remission in only 1 of 14 cases but believes that the hormone may be useful in study of the diuresis mechanism. All patients were under 16 years and most were 2 to 5 years old; none had severe renal damage or insufficiency. As a rule, dosage was 15 mg. injected intramuscularly every six hours for four to six days, with larger amounts for the older children. Sodium chloride intake was limited. Salt and water excretion resembled spontaneous diuresis. Edema was completely cleared in 5 cases during 7 of 8 courses, much reduced in 4 cases, and not affected in 5.

Pediatrics 7:457-471, 1951.

Surgery

Arterial Ligation in Cirrhosis

Tying of the common hepatic and splenic arteries is a simple and effective method of reducing severe portal hypertension with Laennec's cirrhosis. Dr. William F. Rienhoff, Jr., of Johns Hopkins University, Baltimore, ligates the main hepatic artery distal to branching of the gastroduodenal artery. The splenic vessel is tied at its point of departure from the celiac axis. All of 6 patients operated on returned to active life, and all were well when last observed, up to three and a half years later, with no recurrence of ascites or esophageal bleeding.

Bull. Johns Hopkins Hosp. 88:368-375, 1951.

Diagnosis

Serum Test for Cancer

A serofloccculation reaction for detecting cancer employs a synthetic substance instead of antigen obtained from human cancerous liver tissue. The antigen substitute was developed by Dr. Harry S. Penn of the University of California, Los Angeles. Tests using the synthetic were made for over 900 patients and were more than 98% accurate in showing positive reactions, declare Dr. Claude S. Mumma and associates of the Los Angeles Veterans Administration Hospital and the University of California. Incidence of false positive reactions was 28.57%, necessitating biopsy for correction of diagnosis.

Urology

Relief of Cystitis Symptoms

Urethrotrigonitis in women is usually controlled by Furacin, even after failure of other agents. Full strength Furacin solution is diluted 1:6 with sterile isotonic saline, and 50 cc. is instilled into the bladder. The liquid is retained at least thirty minutes, and three injections are given in eight days. Drs. T. H. Sweetser, Jr., and C. H. Harrison, Jr., of the University of Tennessee, Memphis, describe treatment of 43 patients. All acute and the majority of chronic symptoms were relieved and better results were obtained than with strong silver protein solution. In vitro, Furacin inhibited most types of organisms that commonly infect the urinary tract and quickly killed *Escherichia coli*.

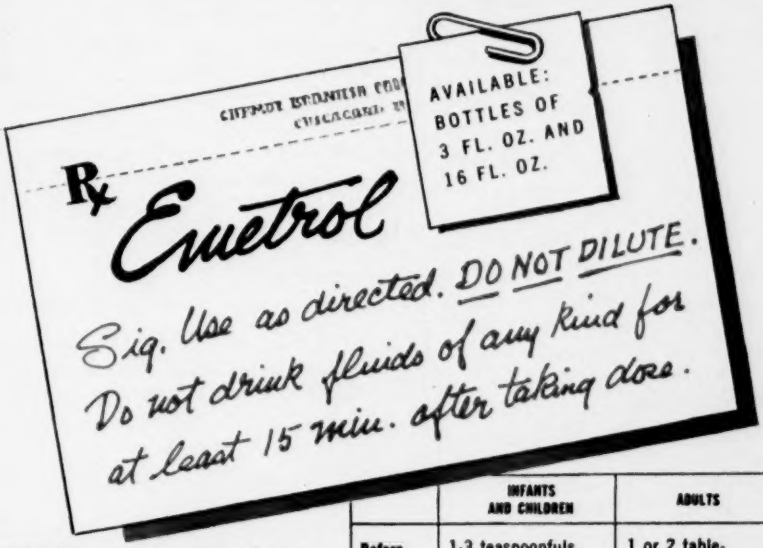
J. Urol. 65:684-687, 1951.

FOR RAPID...SAFE...PHYSIOLOGIC CONTROL OF FUNCTIONAL VOMITING

EMETROL®

PHOSPHORATED CARBOHYDRATE SOLUTION

- before and after anesthesia
- in early pregnancy
- in epidemic vomiting



EMETROL is a phosphorated carbohydrate solution which controls functional vomiting through a unique physiologic action. Clinical findings have established its broad therapeutic effectiveness.[1]

Since EMETROL is free of antihistamines, barbiturates, narcotics, or stimulants, it may be prescribed for patients of all age groups with complete safety. Its delicious "peppermint candy" taste makes every dose welcome to the patient.

	INFANTS AND CHILDREN	ADULTS
Before and after anesthesia	1-3 teaspoonfuls 15-30 minutes before anesthesia and as soon as feasible after operation	1 or 2 tablespoonfuls at same intervals as for children
Early pregnancy		1 or 2 tablespoonfuls on arising, repeated every three hours or whenever nausea threatens
Epidemic vomiting	1 or 2 teaspoonfuls at 15-minute intervals until vomiting ceases	1 or 2 tablespoonfuls at 15-minute intervals until vomiting ceases

1. Bradley, J. E., et al.: J. Pediat. 38: 41 (Jan.) 1951

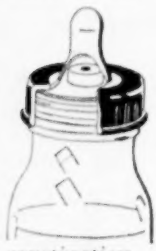
LITERATURE AND SAMPLES TO PHYSICIANS ON REQUEST

Kinney® **KINNEY & COMPANY,** *Prescription Products,* COLUMBUS, INDIANA

Pediatrics

New Suckling Device

About 70% of babies are entirely bottle fed by the age of 1 month, and because of inefficient nipples, many suffer from hunger-air syndrome.



Either the holes are too small, so that milk cannot easily pass, or too large, causing a constant flow. In either case, air-swallowing leads to distention, colic, vomiting, diarrhea or constipation, and incessant crying.

A check-valve device described by Dr. Richard D. Hawkins of Baylor University, Houston, allows natural suckling (see illustration). The nursing control is inserted between an ordinary nipple and screw-cap bottle. As the infant compresses the nipple, the valve closes, milk flows into the mouth, and only a little passes back through a small relief orifice. When expanded, a large opening is created and the nipple fills with milk. When pressures in nipple and bottle are equal, a spring closes the valve. The child receives milk according to effort and not in the relaxed phase of suckling. The aid is particularly useful with prematurity or for babies with lip and palate defects.

J. Pediat. 38:484-490, 1951.

Ophthalmology

Hormones for Cataract

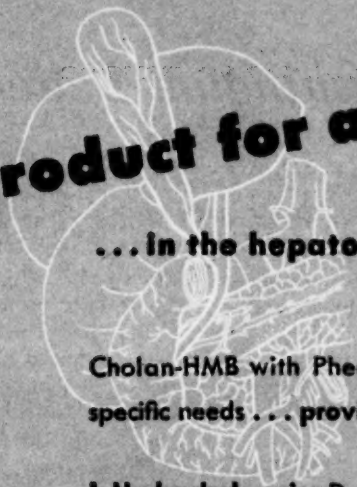
Vision may be improved for some patients with cataract by administration of hormones. Of 29 patients between 25 and 55 years old given endocrine treatment, 11 experienced some degree of improvement in vision, report Drs. Arno E. Town and A. E. Rakoff of Jefferson Medical College, Philadelphia. During trial periods of from six weeks to three months, male patients received thrice-weekly injections of 50 mg. of testosterone propionate, later increased to 75 mg. Women were given 10 mg. of methyl testosterone daily by mouth and a water soluble estrogen on a cyclic basis. Improvement was noted in 4 of 6 patients given testosterone propionate, in 6 women who received methyl testosterone, and 1 of 4 given ACTH.

Endocrinology

Aspirin and Adrenal Hormones

Salicylate therapy of the collagen diseases is apparently related to hormonal treatment with cortisone and ACTH. Aspirin increases urinary excretion of the reducing steroids but has no regular effect on 17-ketosteroid levels, announce Drs. H. Van Cauwenberge and C. Heusghem of the University of Liége, Belgium. Acetylsalicylic acid was given in large doses, 1 gm. every three hours, for eight days to several weeks in 8 cases, including acute rheumatic fever, rheumatoid arthritis, ankylosing spondylitis, and fibrositis with endarteritis of the legs. Urinary excretion of reducing steroids was unusually low before the course, ordinarily doubled during therapy, and dropped immediately after the drug was discontinued. As steroid excretion rose, the temperature, sedimentation rate, and symptoms improved.

Lancet 260:771-778, 1951.



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. . . in the hepato-biliary syndrome

Cholan-HMB with Phenobarbital meets three specific needs . . . providing:

1. Hydrocholeresis. Dehydrocholic Acid-Maltbie increases markedly the volume and fluidity of bile . . . removing mucus, inspissated bile and bacteria.

2. Spasmolysis. Positive, smooth muscle relaxation effected by the antispasmodic homatropine methylbromide . . . no atropine-like side effects.

3. Sedation. Phenobarbital assures dependable sedation without drowsiness.

—in the treatment of the hepato-biliary syndrome.

Each Cholan-HMB with Phenobarbital Tablet contains: Dehydrocholic Acid-Maltbie, 3¾ gr., homatropine methylbromide, 1/24 gr., phenobarbital, ⅛ gr.

Cholan-HMB

with Phenobarbital tablets

MALTBIE LABORATORIES, INC., Newark 1, New Jersey

Washington Letter

Status of Doctor in Regard to Military Service Clarified

"The Year of Great Confusion" about military medical personnel is coming to an end.

Just one year ago, this was the situation: The armed forces were expanding as fast as possible through increased draft calls as well as call-up of individual reserves and units. Consequently the demand for medical officers in all services was urgent, but the only certain way of obtaining them was by the obviously inequitable system of calling on reserves who had served in World War II.

What happened in this last year has not pleased all involved—specifically the few hundred reserve doctors who were called up on mandatory orders. But by now all the major problems have been solved, not through any one person's brilliance, but through the patient, detailed work of everyone concerned—military officials, Selective Service officials, and Congress.

"He is a baby doctor. I am a pediatrician!"

Regardless of the eventual size of the armed forces, a few basic operating rules have been laid down for doctors, based partly on regulations and partly on law. From now on the doctor and draft board will be able to predict well in advance what his military obligation will be.

Except for a few specialists, reserves will be called up in inverse relation to their previous military service, once all the government educated doctors have been inducted. This means that the man with long World War II service will not be called until

Stops POISON IVY DERMATITIS ...fast!

NEOXYN brings dramatic and rapid relief from the itching of poison ivy, poison oak and poison sumac dermatitis, followed by progressive remission of local inflammation.

Thorough clinical testing in a large series of controlled cases showed 90 per cent effectiveness—relief in less than one hour, and definite evidence of healing within twenty-four hours.

NEOXYN is a water-clear solution, clean and easy to use . . . no chalky deposit, no stain, no grease. One treatment is usually sufficient when directions are followed.

NEOXYN is available at prescription pharmacies in cartons containing a 1 ounce bottle, 2 sterile swabs and 2 wooden blades.

WILLIAM H. RORER, Inc. DREXEL BLDG., INDEPENDENCE SQUARE PHILADELPHIA 6, PENNSYLVANIA

NEOXYN IS EASY TO USE . . . NOT A BIT MESSY . . . AND HIGHLY EFFECTIVE

1. Wash the affected area with soap and water.
2. Pour some Neoxyn in a clean dish.
3. Swab freely on and around the affected area.
4. Scrape area with a Neoxyn-moistened blade.

TRY NEOXYN ON YOUR NEXT CASE OF RHUS DERMATITIS. WRITE US ON YOUR LETTERHEAD FOR A TEST PACKAGE

most men with less service have been ordered back. Also, the young physician will not delay his military service by entering the reserves. For reserves called up in the last year, all three services have set up a system virtually guaranteeing release of the men after a limited tour of duty.

Since the start of the Korean war, the Army has called up 120 company-grade officers from the norganized reserve on involuntary orders. Now these men are out of service or may apply for release, with assurance that the request will be granted in all but a few unusual cases. Reservists who signed for active duty during the Army's "moral suasion" campaign in 1949 are eligible for release in July. Others may be released after serving one year more than they agreed to on entering active duty.

In the last year, the Navy has released about 400 medical reserves, including organized reserves, former V-12's who came in during the "moral suasion" campaign, and other volunteers who have served two years. Now all organized reserves called involuntarily may ask for release, and other reserve categories are assured release when the time for which they volunteered has expired.

A comparable situation does not exist in the Air Force, where all reserves called on mandatory orders are members of organized units. However, all Air Force reserves may be released after twenty-one months' service.

Most of the kinks also have been taken out of the doctor-draft operation. Before the summer is out, all men in Priority One will be called to duty. The prospect is that all will serve as members of the reserve, volunteering for active duty before time for induction under selective service. These are men educated at government expense or deferred as students in World War II who have spent less than ninety days on active duty.

By early fall, calls will be going out for some Priority Two men—government-educated or deferred students who have served more than ninety days but less than twenty-one months. Of course, if mobilization is stepped up, other categories will have to be called first, men who had no financial help from the government in their education, but who have not served; and finally, reserves with varying amounts of World War II experience. If this latter group is called, those with the longest previous service would be inducted last.

A large share of credit for the orderly and equitable system goes to the national, state, and local Advisory Committees which work closely with the military services on selection of reserves as well as with Selective Service on the doctor-draft law.

Whatever the shortcomings of this arrangement, most of the confusion and uncertainty have been removed. Now the young physician who is subject to military duty can find out what to expect—and approximately when to expect it.

Washington Notes

Appointment of Maj. Gen. George Armstrong as Army Surgeon General was good news in Washington. He is primarily a surgeon, familiar

Now

no half-measures in lipotropic therapy

There can be no half-measures when seeking the benefits of lipotropic therapy in diabetes, atherosclerosis, liver disorders and disturbances of fat metabolism. Effective dosage and prolonged treatment are the prerequisites of optimal results.

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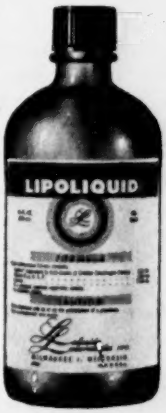
Lakeside

more potent, more palatable

provides the *massive* lipotropic therapy your patients will take for as long as necessary. It is the most potent in total active lipotropic substance. And it is the most palatable liquid lipotropic you can prescribe — yet it is *sugar-free* — a factor of outstanding importance in management of diabetics.



LIPOLIQUID Lakeside Pleasant-tasting, cherry-flavored, aqueous vehicle. Contains no sugar, no alcohol. Each tablespoonful (15 cc.) contains:

Choline* (equivalent to 9.15 Gm. of Choline Dihydrogen Citrate)	3.75 Gm.
Vitamin B_{12} U.S.P.	4.20 mcg.
Inositol	75.00 mg.

* as tricholine citrate.

Available in bottles of 16 ounces (473 cc.).

For high potency lipotropic therapy in capsule form prescribe LIPOCAPS

Lakeside Laboratories INC.
MILWAUKEE, WISCONSIN

with all the problems of the military doctor and his four years as deputy have given him an excellent working knowledge of administration. He was the "sentimental favorite" of his own staff, as well as of the people with whom he has been in contact outside the Army.

Another top job in military medicine is that of Dr. W. Randolph Lovelace II, new chairman of the Armed Forces Medical Policy Council, succeeding Dr. Richard Meiling. Dr. Lovelace is moving to Washington from Albuquerque, N.M., so he can devote full time to his assignment.

Army hospital bed requirements have increased more than 200% in the last year.

Despite scare stories about drafting doctors, Selective Service still insists it doesn't want to "induct a physician as a buck private" and will make every effort to give a man facing imminent induction a chance to volunteer for a reserve officer's commission. Incidentally, during the first eight months of the doctor-draft law, there is no record of a physician being inducted through Selective Service.

Nation-wide campaign of the Army for nurses is being used as evidence of need for federal assistance to medical and dental as well as nursing schools. However, for the last few years nursing schools have not been crowded, an indication that a nursing career has not been too attractive.

Advisory Committees are urging draft boards to defer male student nurses. Shortage of them has appeared in military as well as in civilian hospitals, particularly mental. Committees are also keeping a watchful eye on medical and dental technicians who come up for induction as privates; critical shortages are developing in these fields.

An EMIC program (emergency medical and infant care) is getting great support from the sponsors. U.S. Children's Bureau officials were well prepared with information on the need, as were a number of labor organizations and welfare groups. The professional groups were more restrained; American Medical Association's contribution was a well-documented report showing all the faults in the World War II EMIC program.

Federal aid to local health departments, although favored by every witness heard by the House Committee, may be defeated because of the witnesses' arguments over details. Most critical point is a definition of basic public health services; less important but still controversial is the extent of the surgeon general's power. On the former, FSA Administrator Oscar Ewing said a more restrictive definition than the one offered would interfere with local programs already in operation.

While Congress debated how much money to allow for civil defense operations, CDA officials called representatives of 400 national organizations to Washington and explained why they needed more money. Delegates weren't told to write their congressmen, but the implication was plain.

"must be highly recommended for the rapidity of its healing action"[1]

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OINTMENT

the pioneer external cod liver oil therapy

infants with diaper rash

"were completely cured by modified cod liver oil ointment (Desitin), in from two to seven days". The clinical report[1] notes "rapid healing, without exception, of the most excoriated buttocks."

protective • soothing • healing

in diaper rash, exanthema intertrigo, chafing, irritation
(due to urine, excrement, chemicals or friction)

DESITIN OINTMENT is a self-sterilizing blend of high grade, crude Norwegian cod liver oil (with its unsaturated fatty acids and high potency vitamins A and D in proper ratio for maximum efficacy), zinc oxide, talcum, petrolatum, and lanolin. Does not liquefy at body temperature and is not decomposed or washed away by secretions, exudate, urine or excrements. Dressings easily applied and painlessly removed. Tubes of 1 oz., 2 oz., 4 oz., and 1 lb. jars.

*write for **samples** and reprint*

DESITIN CHEMICAL COMPANY 70 Ship Street • **Providence 2, R. I.**

1. Behrman, H. T., Combes, F. C., Bobroff, A., and Leviticus, R.: Ind. Med. & Surg. 18:512, 1949.

Federal prescription bill hearings reveal a deep and bitter split between national drug houses and local druggists. Drug houses do not want the Food and Drug Administration to maintain a list of "prescription only" drugs, as proposed in the bill; retail druggists favor it. The committee called vainly for testimony from American Medical Association, which, had it testified, would have been acting as judge and jury on an issue of primary concern to two other parties.

Manpower bill conference of House and Senate conferees was held up for weeks because of MacArthur-Far Eastern policy hearings. Senators all wanted to get in on the big show. But before the delay, conferees had agreed to leave most questions of deferment of medical students to local draft boards and to continue the doctor-draft law as is, merely increasing service from twenty-one to twenty-four months.

Newest Federal Civil Defense Administration bulletin, *This Is Civil Defense,* appeals for health service volunteers: "Professional people of the health fields will be contacted by their local civil defense organizations. . . . In addition . . . willing hands are needed to . . . work under professional direction . . . even if . . . only to wash laboratory glassware or mop floors."

Medical care costs, reports the Bureau of Labor Statistics, have increased 2.3% since the start of the Korean war, yet still lag behind general living costs, which have gone up about twice as fast.

House Appropriations Committee has sharply criticized the VA medical department, claiming that too many physicians and dentists are used on administrative jobs where their special skills are wasted.

Doctor to Doctor

Think of a gag that fits the illustration. For every issue a new gag is published and the author is sent $5. The July 1 winner is

Leo Tann, M.D.
Chicago

Mail your caption to
The Cartoon Editor
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No. 2
MODERN MEDICINE
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Minneapolis 3, Minn.

"I, too, might have specialized in gynecology, but I don't have a long enough reach."

double the power to resist food IN OBESITY

"For every person who worries himself thin there are ***three*** who eat their way to obesity."[1] These individuals present a problem to the physician since their chief pleasure is food.

OBOCELL exerts a double action in keeping the obese patient on a diet l-o-n-g-e-r. Obocell (1) suppresses bulk hunger; (2) curbs the appetite. Furthermore, Obocell elevates the mood and supplies non-nutritive bulk residue lacking in obesity diets. Thus, patients on Obocell therapy naturally eat less, do not violate their diet, lose weight and are satisfied and happy.

Each Obocell tablet contains Dextro-Amphetamine Phosphate, 5 mg.; Methylcellulose, 150 mg. *Dose:* Three to six tablets daily, usually given 30 minutes before meals. *Supplied:* In bottles of 100, 500, 1000.

1. Bram, I.: Arch. Ped. 67: 543-552, 1950.

IRWIN, NEISLER & COMPANY
Dept. MM DECATUR, ILLINOIS
Literature and Samples on Request.

Forensic Medicine

ARTHUR L. H. STREET, LL.B.

Prepared especially for Modern Medicine

PROBLEM: In the trial of a malpractice suit, could the jury have decided that defendant doctor was liable for failing to discover and remove one of numerous minute needles used in operating on plaintiff's eye, when the doctor knew or ought to have known that a needle was missing and yet failed to have a roentgenogram made of the eye?

COURT'S ANSWER: Yes.

The Washington Supreme Court said that, if the doctor knew or had good reason to know that a needle might be in the eye, he was bound "to use available methods known to his profession to locate" it (227 Pac. 2d 445).

PROBLEM: A husband and wife sued a doctor for performing a sterilizing operation on her after the delivery of a child, allegedly without authority. When evidence showed that she consented to the operation, was it necessary also to prove, in defense of the suit, that the husband consented also?

COURT'S ANSWER: No.

In support of its decision, the California District Court of Appeals cited opinions of other courts.

In a Michigan case, the Supreme Court decided that a widow could not hold a surgeon liable for operating upon her husband, resulting in his death, on a theory that her consent was necessary. The court said that since the patient gave his consent, the wife's consent was not necessary (257 N.W. 703).

In a Maryland case, a widower sued for alleged malpractice in the excision of a cancer in his wife's breast. She had apparently consented, knowing that a cancer existed. The husband claimed that he consented to an operation on an understanding that a tumor was to be removed. The Maryland Court of Appeals said that the husband had no power to withhold needed treatment from his wife. He could not refuse to consent on a theory that an operation would afford only temporary relief and would therefore result in "useless expense" (16 Atl. 382).

The California court also cited decisions to the same effect by the appellate courts of Texas and the District of Columbia (224 Pac. 2d 808).

PROBLEM: When a physician sues a county on a disallowed claim for medical services to poor persons, is he bound to prove that the services were authorized by the proper county board or officer and that the patients were entitled to attention at public expense?

COURT'S ANSWER: Yes.

A Nebraska doctor's claims against a county, aggregating $1,625.50, were allowed by the county board at only $683.50. He sued, and a jury allowed

(Continued on page 126)

symptomatic relief, with Anacin

*"The treatment of headaches of systemic origin is based on the treatment of the systemic disorder. At times, however, it is necessary to give symptomatic relief first."**

During the period when a complete examination is being conducted the patient can be relieved of painful headache symptoms quickly and effectively with Anacin. These tablets best demonstrate the effectiveness of the widely favored APC formula in cases of headache, neuritis and neuralgia. Anacin works speedily, with a duration of action that is gratifying to the patient. Anacin is available at all pharmacies for your patients. Samples will be sent to you on request.

*Headache—I. G. Moench Chapter 7—Page 139

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ATHEROSCLEROSIS

Too Much Cholesterol or Too Little Phospholipids?

INCREASE PHOSPHOLIPIDS

The new isotope technique[3] has demonstrated that:

(a) choline deficiency occurs in man;

(b) phospholipid production is increased in deficiency states by choline;

(c) individuals differ in choline needs;

(Inositol also enters into synthesis of certain phospholipids.[4])

DECREASE CHOLESTEROL

Although cholesterol plasma levels may not be affected by dietary restrictions, the physical state of the cholesterol may be affected. Thus, "giant cholesterol molecules" associated with atherosclerosis may be eliminated by dietary control.[5]

RATIONAL MEASURES

In the light of these recent studies, *adequate* lipotropic therapy and cholesterol-restricted diets are rational measures in:

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CORONARY ARTERY DISEASES
DIABETES
And Other Unbalanced Conditions of Disturbed Cholesterol Metabolism

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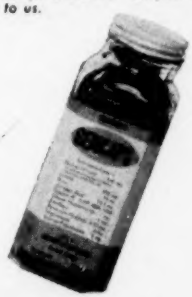
Supply Therapeutic Dosage of Lipotropics (700 mg.) with Vitamin A and B Complex factors to help compensate for deficiencies of low-cholesterol diets with Rutin and Vitamin C to prevent the retinopathy often associated with above diseases.

For Literature and Clinical Trial Package please write "Gericaps Literature" on post card, sign and send to us.



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[1]Morrison L.M.: Tests for Atherosclerosis. Proc. AM. Soc. for Study of Atherosclerosis P 478 (1950)

[2]Gertler, M.M.; Stanley M.; Blund, E.F.; Age, Serum, Cholesterol and Coronary Artery Disease. Circulation 2:517 (1950)

[3]Science 109:613 (June 17) 1949

[4]Biochem. J. 40:494 (1946)

[5]Gofman, J.W.; et al.; Science, 111:166 (1950)

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Good to excellent results with PROTAMIDE"

. . . In 28 Cases of HERPES ZOSTER at Bethesda Naval Hospital*

William C. Marsh, Commander (MC) U.S.N., in a currently published paper[1], "Treatment of Herpes Zoster with Protamide," now available to physicians as a reprint, presents these findings:

Thirty-one cases of herpes zoster were treated with Protamide. Good to excellent results were obtained in twenty-eight. In those failing to respond other factors besides age of patient may have been involved.

No controls were in our study as thousands of intramuscular injections of other drugs given to patients with herpes zoster in the past, with no appreciable benefit, would adequately serve as a control.

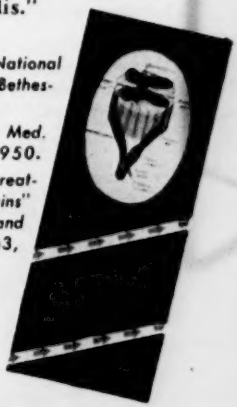
Pain, not merely the discomfort or itching, was the indication for treatment. Protamide (1.3 cc, the contents of one ampul) was given daily intramuscularly.

No other local or systemic medications were given.

"The relief of pain was superior to that obtained when using either pituitrin, thiamine chloride, autohemotherapy, sodium iodide, or high voltage Roentgen therapy.

"The advantages of Protamide are the simplicity and absence of pain in administration, lack of reactions, and apparent safety.

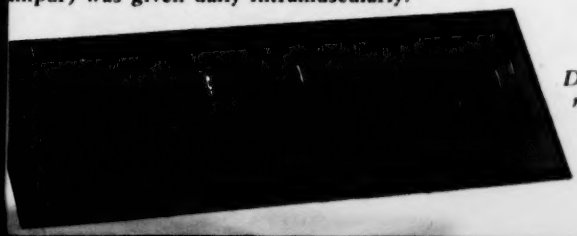
"Costello[2] found that Protamide was effective in the relief of the posterior root pain of tabes dorsalis."



* *U. S. Naval Hospital, National Naval Medical Center, Bethesda, Maryland.*

1. U.S. Armed Forces Med. Journal, September, 1950.

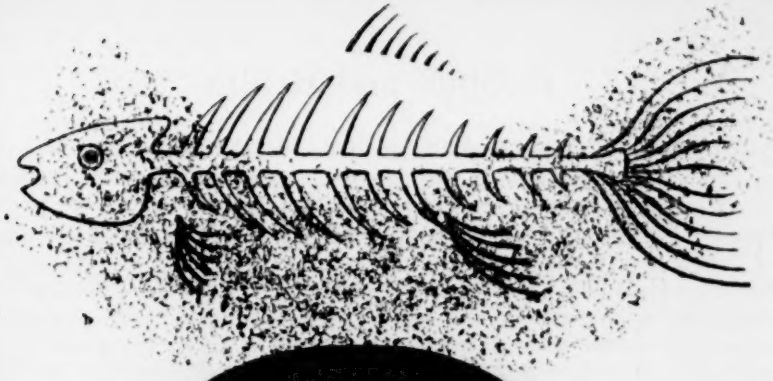
2. Costello, R. T. New treatment for "lightning pains" of tabes dorsalis, Urol. and Cutan. Rev. 51: 260-263, May, 1947.



DOCTOR: Your prescription blank marked "Protamide" will bring you a compilation of papers together with folder—"FOR PROMPT RELIEF OF POSTERIOR NERVE ROOT PAIN." Send for them today.

him $343.33 more. An appeal to collect the balance called for by his claims failed, largely because the doctor failed to prove that the patients resided in the county and were unable to earn a livelihood. Those were the conditions under which the county could obligate itself (229 N. W. 294).

However, the courts seem to be agreed that when officials could have authorized rendition of services by a particular doctor to a particular patient at public expense, failure to secure that authorization in advance can be cured by subsequent ratification. For example, in an Iowa case, a statute provided that a local board of health could provide medical attendance for inhabitants having dangerous infectious or contagious disease. The mayor of a city authorized a physician to attend afflicted persons. The Iowa Supreme Court said that, even assuming that the mayor had no right to engage the doctor, the county was liable on the bill because the board of health approved it when filed. The court decided that this ratification of the services rendered was equivalent to prior authorization (124 N.W. 894).



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No fishy odor, taste or aftertaste; no allergies due to fish oils. That's the inside story of DAYALETS, the compressed multivitamin tablet with *synthetic* vitamin A...seven other synthetic vitamins...plus B_{12}.

These little tablets can't leak, won't stick together in the bottle. They're pleasantly flavored, easy to swallow, better tolerated by patients than soft gelatin capsules. One tablet daily as a supplement, two or more for therapeutic use. In bottles of 50, 100 and 500 sugar-coated tablets. Abbott

Each DAYALET Tablet contains:

Vitamin A (synthetic vitamin A palmitate)	10,000 U.S.P. units
Vitamin D (Viosterol)	1000 U.S.P. units
Thiamine Mononitrate	5 mg.
Riboflavin	5 mg.
Nicotinamide	25 mg.
Pyridoxine Hydrochloride	1.5 mg.
Vitamin B_{12} (as vitamin B_{12} concentrate)	1 mcg.
Pantothenic Acid (as calcium pantothenate)	5 mg.
Ascorbic Acid	100 mg.

Dayalets

TRADE MARK

(Abbott's Multiple Vitamins)

Hobbies and Health

WILLIAM TRAVIS GIBB, JR., M.D.*
George Washington University, Washington, D.C.

THE bank president who goes on fishing trips, paying a large price for the privilege of living in a log cabin, eating greasy food, and associating with backwoodsmen, and who will take time during a crowded business day to discuss the habits of rainbow trout with a young employee, is not in his dotage.

The great trial lawyer who for years has been an authority on the migrations of the American Indians is not senile. The young vice-president of a large advertising firm who builds and flies gas-powered model airplanes is not demented. The high-salaried, high-pressure movie executive who cuts and polishes semiprecious stones in a home workshop is not queer. The busy physician who spends long hours training setters to compete in field trials is not in second childhood. Nor are the bird spotters, collectors of obsolete automobiles, raisers of orchids, breeders of tropical fish, collectors of first editions or matchbooks, or amateur horologists. These people are all hobbyists and, as a group, successful, happy, contented, and free of neurotic complaints and impulses.

The psychologists and educators spend a great deal of time worrying about self-expression in the child, and much of modern education is directed toward this objective. Somehow or other, when the individual becomes an adult, all this is entirely forgotten. What is good for the child is also good for the adult, and hence hobbies are of inestimable value.

Individuals must have a definite sense of accomplishment and a means of self-expression to remain in sound mental health. A hobby pro-

* The relationship of hobbies to health. M. Ann. District of Columbia 20:205-210, 242, 1951.

vides a way to obtain this feeling of achievement outside of regular work and releases pent-up energies and emotions which otherwise might be sublimated in some less desirable fashion.

William Travis Gibb, Jr., M.D., presents the following criteria for a hobby:

- The nature of the avocation must be radically different from the means by which a person earns a living, should bring into play potentialities not used in his regular work, and ought not to be planned to augment income.
- The hobby should be such that it can be indulged in at any time for as long or short a period as strikes the fancy and should be a definite part of the participant's scheme of living, with space set aside for its pursuit in the home.
- All the details of a hobby should be carried out personally as far as is practical, no step or operation being relegated to others unless facilities are not available.

Before the Industrial Revolution, life in general was much simpler and far more satisfactory than now. Business and professional efforts were on a smaller scale, and specialization was rare. The man who owned a business was intimately associated with all its details and was usually personally responsible for its operation, being bookkeeper, salesman, window dresser, buyer, executive, and even writer of the advertising copy. The owner controlled all the details of the enterprise and had the satisfaction of knowing that success or failure was entirely dependent upon his own efforts.

Now the situation has become different. We are living in an age of specialization.

The individual usually performs only one detail of a complex operation, and the tempo and manner of work are governed by factors over which he has no control. Specifications and deadlines must always be met. These limitations produce a profound feeling of frustration, particularly for perfectionists.

A worker never has the satisfaction of completing an operation from beginning to end and, as a result, has no genuine sense of accomplishment. Even the man who owns a business has to put up with the work of others which may not satisfy his own standards.

The same situation exists among the professions. In days gone by a doctor personally treated all the ills that beset mankind, caring for the patient as a whole, not a small portion of anatomy. The lawyer handled any sort of case that came along, from writing a will to rending a moot point in admiralty law. Now, specialization in these endeavors has forced the professional man to stay within one narrow segment of a wide and interesting field. The infinite variety formerly enjoyed is lost, the work is often relatively monotonous, and a broad view is almost impossible.

This state of affairs, of course, makes for greater efficiency and better service and certainly benefits the consumer but extracts a tremendous toll of the individual in the form of tensions, anxiety, and frustration. This is where hobbies can bring relief.

Current Books & Pamphlets

This catalogue is compiled from all available sources, American and foreign, to insure a complete listing of the month's releases.

Medicine

BEHANDLUNG DES GELENKRHEUMATISMUS UND VERWANDTER ZUSTÄNDE *by* Bernhard Aschner. 404 pp. Hippokrates, Marquardt & Co., Stuttgart. 27 M.

HYPERTENSION: A SYMPOSIUM *edited by* E. T. Bell. 573 pp., ill. University of Minnesota Press, Minneapolis. $7.50

GASTRITIS, ULKUS UND KARZINOM: RÖNTGENSTUDIE UNTER BERÜCKSICHTIGUNG FORMAL-GENETISCHER BEZIEHUNGEN *by* J. Bücker. 89 pp., ill. Georg Thieme, Stuttgart. 11.50 DM.

SÉMIOLOGIE CLINIQUE: AFFECTIONS DE L'APPAREIL RÉSPIRATOIRE; AFFECTIONS DE L'APPAREIL CIRCULATOIRE; AFFECTIONS DU THORAX, DU MÉDIASTIN ET DU DIAPHRAGME *by* P. Delafontaine *and* G. Damiens. 522 pp., ill. Ernest Flammarion, Paris. 1,300 fr.

EXOTISCHE KRANKHEITEN UND KRANKHEITSVERLÄUFE *by* F. O. Höring. 407 pp., ill. Georg Thieme, Stuttgart. 36 M.

Pharmacology

LABORATORY MANUAL FOR PHARMACOGNOSY *by* Edward P. Claus. 2d ed. 111 pp. C. V. Mosby Co., St. Louis. $3.25

THE DISPENSATORY OF THE UNITED STATES OF AMERICA *edited by* Arthur Osol *et al.* 24th ed. 2,057 pp., ill. J. B. Lippincott Co., Philadelphia. $25

HISTAMINE ANTAGONISTS *by* Frederick Leonard *and* Charles P. Huttrer. 122 pp. National Research Council, Washington, D.C. $1.50

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DISEASES OF THE HEART AND CIRCULATION *by* Paul Wood. 589 pp., ill. Eyre & Spottiswoode, London. 70s.

Atomic Energy

ATOMIC PHYSICS *by* Wolfgang Finkelnburg; *translated by* George E. Brown. 498 pp., ill. McGraw-Hill Book Co., New York City. $6.50

HOW TO SURVIVE AN ATOMIC BOMB *by* Richard Gerstell. 150 pp. Rinehart & Co., New York City. $1.95

WE OF NAGASAKI: THE STORY OF SURVIVORS IN AN ATOMIC WASTELAND *by* Takashi Nagai; *translated by* Ichiro Shirato *and* Herbert B. L. Silverman. 189 pp. Duell, Sloan & Pearce, New York City. $2.75

INDUSTRIAL AND SAFETY PROBLEMS OF NUCLEAR TECHNOLOGY *edited by* Moreis H. Shamos *and* Sidney G. Roth. 368 pp., ill. Harper & Bros., New York City. $4

Sex Hygiene

DAS PROBLEM DER BISEXUALITÄT *by* Burghard Breitner. 77 pp. Wilhelm Maudrich, Vienna. 20 Sch.

FACTS OF LIFE AND LOVE FOR TEENAGERS *by* Evelyn Millis Duvall. 360 pp., ill. Association Press, New York City. $3

DIE FUNKTIONELLEN SEXUALSTÖRUNGEN *by* Werner Kemper. 102 pp. Georg Thieme, Stuttgart. 5.70 M.

SEX EDUCATION AS HUMAN RELATIONS: A GUIDEBOOK ON CONTENTS AND METHODS FOR SCHOOL AUTHORITIES AND TEACHERS *by* Lester A. Kirkendall. 351 pp. Inor Publishing Co., New York City. $4.50

RAPID DISAPPEARANCE OF DIARRHEIC STOOLS

permitting
early re-alimentation and hydration
by the oral route[1]

Recent studies[1,2] have demonstrated the unusually dependable value of Arobon in acute diarrheas of infants and children. Within a matter of one to two days, in the majority of patients the stools thicken and lessen in frequency. Thus early re-alimentation and hydration by the oral route and earlier resumption of normal feeding are possible.

Arobon, processed from carob flour, owes its pronounced anti-diarrheal activity primarily to its high content of lignin as well as pectin. Absorbing a considerable amount of water, it swells to a bland, smooth, bulky mass in the intestine, which eliminates offending bacteria and toxins with the stools, thus causing the diarrhea to subside quickly.

Arobon is indicated in all types of diarrhea in infants and children. It is palatable and readily tolerated. Arobon is ready for use by merely boiling it in water for ½ minute.

1. Smith, A. E., and Fischer, C. C.: The Use of Carob Flour in the Treatment of Diarrhea in Infants and Children, J. Ped. *35*:422 (Oct.) 1949.
2. Kaliski, S. R., and Mitchell, D. D.: Treatment of Diarrhea with Carob Flour, Texas State J. Med. *46*:675 (Sept.) 1950.

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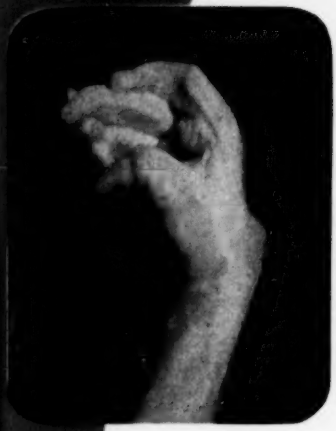

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Results reported by investigators include diminution of pain, decrease of soft tissue swelling, increase in range of motion, better muscular tone, greater endurance.

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SURGEONS TWOE AND A BARBER: BEING SOME ACCOUNT OF THE LIFE AND WORK OF THE INDIAN MEDICAL SERVICE (1600-1947) *compiled and edited by* Donald McDonald. 295 pp., ill. William Heinemann, London. 42*s*.

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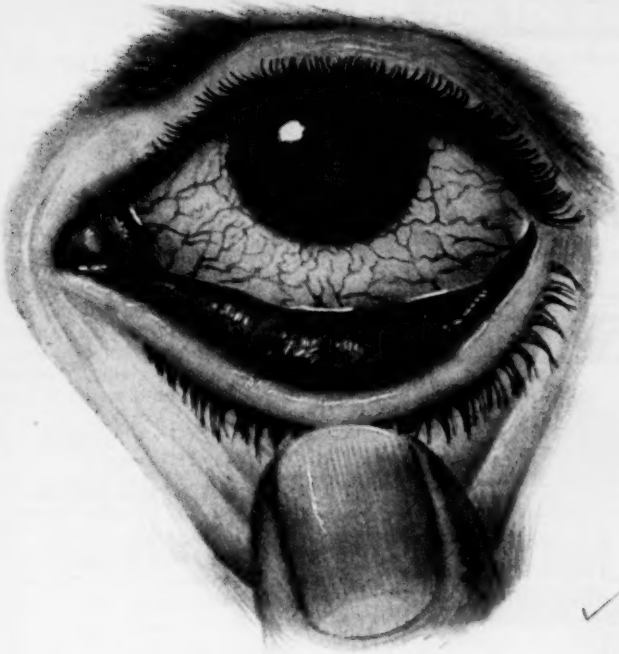

"Terramycin appears to be the drug of choice in . . . angular conjunctivitis, micrococcal blepharitis, marginal blepharitis, pneumococcal conjunctivitis, chronic dacryocystitis, serpent ulcer of the cornea, infection by Neisseria catarrhalis and acute purulent inflammation."

Mitsui, Y., et al.: Antibiotics and Chemotherapy (In Press).

"Trachoma and inclusion blennorrhea respond well to treatment with terramycin."

Mitsui, Y., and Tanaka, C.: Antibiotics and Chemotherapy **1**:146 (May) 1951.

available: Crystalline Terramycin Hydrochloride Ophthalmic Ointment, 1 mg. per Gm. ointment, ⅛ oz. tube;

Crystalline Terramycin Hydrochloride Ophthalmic Solution, 25 mg. in 5 cc. dropper-vials.

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PATIENTS . . . *I Have Met*

The editors will pay $1 for each story published. No contributions will be returned. Send your experiences to the Patients I Have Met Editor, MODERN MEDICINE, 84 South Tenth St., Minneapolis 3, Minn.

Takes Guts

He was an indefatigable hypochondriac and would not be put off.

"Mr. Jones," I said, "take a brisk walk every morning on an empty stomach."

"That I'll do and gladly," responded Mr. Jones, "but whose stomach?"—K.I.S.

That's How It Read

A patient of mine who had been looking desperately for a room showed me this ad from our daily paper: "Room for rent. Man. Large private." "It isn't enough," he snorted, "that they are asking large rents."—W.K.

Out at the Time

I was trying to ascertain whether the patient had had a true chill.

"Did you shake all over?" I asked.

"Yes, Doctor, I did," she answered.

"And did your teeth chatter?"

"Well, I imagine that they would have," she replied, "but they were on the table at the time."—C.C.J.

"Sir, an old soldier is here to see if he is fading away."

When Rapid Growth Calls For HIGH IRON and THIAMINE Remember RALSTON!

Instant Ralston—enriched whole wheat cereal—is a *rich* source of iron and thiamine. A single 1-ounce serving supplies the following percentages of the minimum daily requirement:

	1-6 years	6-12 years	adults
IRON	113%	84.9%	84.9%
THIAMINE	84%	56%	42%

Plus 3.5 Gm. PROTEIN

Instant Ralston supplies riboflavin and niacin, too . . . in taste-appealing, readily digested form.

Cooks in 10 seconds

FREE!

Pediatric Feeding Directions: birth to 3 mos., 3-6 mos., 6-10 mos., over 10 mos.

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Waife, S. O.: Medical Clinics, p. 1718, November 1949.

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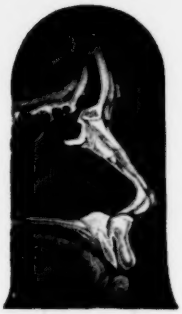

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1. Friedlaender, S. and Friedlaender, A.S.: Am. Pract. 2:643, 1948

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